

## **3 SUMMARY**

### **3.1 INTRODUCTION**

This summary chapter is provided in accordance with State CEQA Guidelines §15123. As stated in §15123(a) of the State CEQA Guidelines, “[a]n EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical.” State CEQA Guidelines §15123(b) states:

[T]he summary shall identify: (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and (3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.

Accordingly, this summary includes a brief synopsis of the proposed mine expansion project, project alternatives, environmental impacts and mitigation, areas of known controversy, and issues to be resolved in the EIR. Table 3-1, at the end of this chapter, presents the summary of potential environmental impacts, their level of significance without mitigation, mitigation measures, and levels of significance with mitigation.

### **3.2 SUMMARY OF PROPOSED PROJECT**

The primary objectives of the applicant are to secure permits and approvals to fully develop the known high-quality sand and gravel deposits located at the project site; to maximize the use of onsite facilities, equipment, and personnel; and to maximize the return on capital investments. In addition, the proposed expansion project would allow the applicant to continue to supply sand and gravel products for future demand in the region. The basic objectives of the project, as stated by the applicant, are as follows:

1. Encourage the production and conservation of mineral resources, while giving consideration to environmental factors.
2. Allow for the development of a sufficient supply of aggregate and asphalt to meet the future needs of society while increasing the level of environmental protection and monitoring.
3. Develop known aggregate reserves in close proximity to existing permitted processing plant facilities, to provide optimum efficiency and economy of operation.
4. Provide for a reasonable period of approved operations, in accordance with the availability of resources, lease agreements, and foreseeable mining and reclamation plans.

5. Provide continued employment for 44 people, create new job opportunities, and indirectly support employment in trucking and other related businesses.
6. Protect lands containing identified mineral deposits from the encroachment of incompatible land uses, so that aggregate resources remain available for future use, as needed.
7. Implement a reclamation program designed to minimize erosion, re-establish vegetation, wildlife habitat, and agricultural uses; and limit aesthetic impacts created by mining.
8. Conduct mining so that the disturbance of the existing landscape is short-lived and temporary, to the greatest extent possible, and will be reclaimed so that the property can be used and enjoyed in perpetuity by current and future generations.

The Patterson Sand and Gravel Mine Expansion Project (the proposed mine expansion project) is proposed by Patterson Sand and Gravel, the current operator of the mine. The applicant proposes to expand its mining operation to include approximately 448 acres (the proposed expansion area) located on a 884-acre site (project site) that includes the existing operation, walnut orchards, rice fields, and the proposed expansion area. The project site is located in Placer and Yuba counties, approximately 2.5 miles east of the unincorporated community of Sheridan in Placer County and 4 miles east of Wheatland in Yuba County. The proposed mine expansion project would include mining of sand and gravel deposits on up to 365 acres of the approximate 448-acre proposed expansion area over an approximate 55-year mining period. In addition, mining and reclamation would continue in the currently permitted area (referred to in this document as "Phase 1") through approximately 2020 (Exhibit 2-9). Mining of the currently permitted area (Phase 1) and the proposed expansion area would occur over a 55-year period. The proposed project would also include modifications to the current mine reclamation plan to incorporate the proposed expansion area, as well as the construction and operation of an asphalt batch plant capable of producing up to 300,000 tons of asphaltic concrete per year. The proposed mine expansion project would operate as an extension of the existing operation and would incorporate existing facilities, methods, and production rates.

### **3.3 SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT**

State CEQA Guidelines §15126.6 requires that an EIR include an evaluation of a range of reasonable alternatives to the proposed project, or to the location of a project, that would feasibly attain most of the project objectives but would avoid or substantially lessen any of the significant effects of the project. Chapter 17, Alternatives to the Proposed Project, of this EIR provides an analysis of the impacts anticipated from four alternatives to the proposed project. The EIR alternatives include a No Project Alternative, which would include the completion of mining and final site reclamation in accordance with the current mine reclamation plan, a No Asphalt Batch Plant Alternative, and a Reduced Acreage Alternative. Potential environmental impacts of the mine expansion alternatives are discussed as comparisons to the proposed mine expansion project. Significant environmental impacts resulting from alternatives evaluated in Chapter 17 but not from the proposed mine expansion project are also identified.

In addition, a Haul Route Alternative is evaluated in Chapter 17 in an equal level of detail as the proposed project. If the Placer County Board of Supervisors decides to approve the Haul Route Alternative to serve the proposed mine expansion project, haul trucks serving the mine would be routed away from the existing route along Riosa Road onto the approved haul route alignment. Placer County is only considering approval of the Haul Route Alternative in combination with approval of the proposed mine expansion project, and is not considering approval of the Haul Route Alternative as a stand-alone project. Two alignments for the Haul Route Alternative are analyzed in this EIR.

As discussed in Section 17.4 of this EIR, the Reduced Acreage Alternative is considered the environmentally superior mining and processing alternative. The feasibility of the Haul Route Alternatives would depend upon the County's ability to acquire the private lands within the chosen alignment and its plans to construct an additional storage pond and irrigation spray field within a portion of alignment 2. If Haul Route Alternative alignment 2 is determined to be feasible, it would be the environmentally superior haul route alternative that meets all project objectives. If alignment 2 is not feasible, but alignment 1 is feasible, it would be the environmentally superior haul route alternative that meets all project objectives. If neither Haul Route Alternative alignment is feasible, continued use of the existing haul route would be the environmentally superior haul route alternative that feasibly meets all project objectives.

### **3.4 AREAS OF CONTROVERSY, ISSUES RAISED, AND AREAS RESOLVED IN THE EIR**

#### **ISSUES RAISED**

A Notice of Preparation (NOP) for the Patterson Sand and Gravel Mine Expansion Project EIR was circulated for public review in June 2000 and a subsequent NOP for construction of an alternate haul road to bypass Sheridan was published, in accordance with State CEQA Guidelines §15082(a). Interested persons or agencies were encouraged to comment on the scope and content of the EIR. An Initial Study was attached to the NOP and contained a summary of the probable environmental effects of the proposed mine expansion project. The NOP, Initial Study, and comment letters on the NOP are contained in Appendix A of this EIR. The public review period for the NOP ended on April 9, 2001.

This EIR addresses the environmental issues to be resolved that either are identified in the Initial Study or were raised by agencies or interested parties during public review of the NOP and direction from Placer County in response to concerns raised by the general public. The following summarizes the primary environmental issues addressed in the EIR relative to the proposed mine expansion project. The issues presented below are followed parenthetically by the EIR chapter (number and title) in which the issue is addressed.

- ▶ Farmland conversion (Chapter 4, Land Use/Agriculture)
- ▶ Land use plan consistency (Chapter 4, Land Use/Agriculture)
- ▶ Land use compatibility (Chapter 4, Land Use/Agriculture, and various other chapters)
- ▶ Degradation of visual resources and nighttime lighting (Chapter 5, Visual Resources)
- ▶ Fire (Chapter 6, Public Services)
- ▶ Mine-related truck traffic (Chapter 7, Traffic)

- ▶ Air emissions and health risk (Chapter 8, Air Quality)
- ▶ Noise (Chapter 9, Noise)
- ▶ Seismicity (Chapter 10, Geology, Minerals, and Soils)
- ▶ Surface water and groundwater impacts and flooding (Chapter 11, Water Resources)
- ▶ Biological resources (Chapter 12, Biological Resources)
- ▶ Vectors (Chapter 13, Public Health and Safety)
- ▶ Hazardous materials (Chapter 14, Hazardous Materials)
- ▶ Cultural resources (Chapter 15, Cultural Resources)

### **AREAS OF KNOWN CONTROVERSY**

Section 15123 of the State CEQA Guidelines requires that an EIR identify areas of controversy known to the lead agency. Known areas of controversy for the proposed project include:

- ▶ traffic-related impacts on local roadways from the proposed mine expansion project,
- ▶ truck traffic within the unincorporated community of Sheridan,
- ▶ potential noise from project-related sources to nearby sensitive receptors,
- ▶ degradation of air quality from the proposed mine expansion project,
- ▶ loss of sensitive biological resources, and
- ▶ disturbance of wildlife and wildlife habitat.

### **3.5 ENVIRONMENTAL SETTING FOR IMPACT ANALYSIS**

#### **CEQA REQUIREMENTS**

The State CEQA Guidelines and CEQA case law contain provisions for determining the appropriate baseline from which environmental impacts should be evaluated. The State CEQA Guidelines indicate that the environmental setting at the time the NOP is published will normally constitute the baseline physical conditions by with the lead agency determines whether an impact is significant (State CEQA Guidelines §15125[a]). Therefore, unless there are reasons to define it otherwise, the baseline in this EIR is this environmental condition at approximately the time the NOP for the proposed mine expansion project was published. The NOP for the proposed mine expansion was published in June 2000, and a subsequent NOP for construction of an alternate haul road to bypass Sheridan was published in March 2001. These environmental conditions are described in the presentations of the existing setting of the project site and area in this EIR. A 1999 court case provided additional guidance about the appropriate definition of baseline as it relates to capacity of an existing aggregate mine and the operation of the mine. In the 1999 CEQA court case, *Fairview Neighbors v. County of Ventura et al.* (82 Cal.Rptr.2d 436, January 28, 1999, as modified February 24, 1999), the Second District of the Court of Appeals determined that the appropriate baseline for evaluation of traffic and related environmental impacts of the proposed Transit Mixed Concrete Company aggregate mine expansion was the operational capacity set in the mine's conditional use permit (CUP), even though the CUP under which the mine had been operating had expired. The CUP had been based on prior CEQA review. The court found that the Transit Mix Concrete Company EIR "appropriately assumes the (baseline) traffic impact level to be the traffic generated with the mine operates at full capacity pursuant

to the entitlement previously permitted.” Therefore, for impacts related to operational aspects of the Patterson Sand and Gravel mine, the baseline is related to the capacity of the operation, recognizing the existing conditional use permit, as explained below.

### **BASELINE CONDITIONS FOR THIS EIR**

For impact issues related to physical setting conditions, the existing setting at the time of the latest NOP (early 2001) is the baseline for the EIR. This approach is consistent with the State CEQA Guidelines.

For impact issues related to the mine’s operations and traffic, a baseline defined by its authorized capacity is used. The existing CUP for the Patterson Sand and Gravel mine (CUP-1093) is based on a 1987 Negative Declaration (ND) (ND EIAQ-2365), so it represents a prior permit that has been subject to CEQA review. The CUP expires in 2028, and it does not contain a specific limit to mine operations. The records of the Patterson Sand and Gravel mine show varying levels of operation, based on market demand, as is typical of aggregate mines. A practical capacity can be reasonably defined by using the highest rate season in the most recent year that comprehensive operational and traffic data is available. Other methods may be used to conceive of a potential, ultimate capacity (such as other permits, like the mine’s air quality permit), but there is a degree of speculation involved in estimating an ultimate capacity. Therefore, the approach of using a practical capacity that has been demonstrated to be feasible is a reasonable approach. Consequently, the baseline related to operations and traffic is defined by the practical operating capacity of the mine authorized under its current permit. This baseline will persist into the future past the 2028 expiration of the permit, because the court indicated that the expiration of the permit in the *Fairview Neighbors* case did not alter the operational baseline. The most recent year of comprehensive operational and traffic data for the Patterson Sand and Gravel mine is 2000. Annual production in 2000 reached its second highest total of all years in the mine’s history. The peak season during 2000 is considered in this EIR to be a reasonable representation of the practical capacity of the mine operation for purpose of the EIR baseline.

Certain types of environmental effects, however, are location-specific and cannot be evaluated solely on the basis of production rates. For example, expansion into a new mining area known to support a sensitive resource (such as a special-status species) might result in a significant environmental impact that would only occur through implementation of the proposed project. Another example might include increased noise at a sensitive receptor caused by mining a new area that is located closer to the receptor than the currently permitted mining areas. This EIR evaluates location-oriented effects of the proposed expansion in comparison to the currently permitted mine area.

### **3.6 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Chapters 4–15 of this EIR evaluate in detail the environmental impacts that would result from implementation of the proposed project. Placer County, in its review of the proposed mine expansion project and determination for action, will consider the entire environmental evaluation contained in this EIR. Following preparation of the Final EIR, Placer County will have the option to certify that the EIR: (1) has been completed in compliance with CEQA; and (2) was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information

contained in the final EIR before approving the project (State CEQA Guidelines §15090). If the EIR is certified, Placer County will determine whether the proposed mine expansion project will be denied, approved, or conditionally approved. In addition, as described in Chapter 1, Introduction, portions of the proposed mine expansion project within Yuba County are normally subject to review and approval by Yuba County. However, here under §2771 of SMARA, Placer County may take the lead on the CUP approvals for both Placer and Yuba counties pursuant to an MOU between the two counties (see Section 1.1 of this EIR). Therefore, this EIR will also be used by Yuba County in its review of the new mining areas proposed within its jurisdiction, unless the MOU is executed.

The counties could, if either of them so choose, approve or conditionally approve the proposed mine expansion project even if significant impacts are identified. When significant effects are identified and the lead agency wishes to approve or conditionally approve the project, CEQA §21081 requires that one of three specific findings be made for each significant effect. Placer County, as the lead agency, must also adopt a “statement of overriding considerations” if the project is approved with unavoidable significant effects on the environment. The statement of overriding considerations is a statement by the decision-makers acknowledging that significant unavoidable environmental impacts are acceptable when balanced against certain economic, legal, social, technological, or other benefits of the project.

As mentioned above, a Haul Route Alternative is evaluated in Chapter 17 in an equal level of detail as the proposed project. Placer County is only considering approval of the Haul Route Alternative in combination with approval of the proposed mine expansion project, and is not considering approval of the Haul Route Alternative as a stand-alone project.

Impacts of the proposed mine expansion project and of the Haul Route Alternative are classified in this EIR as: (1) less than significant (adverse effects that would not result in a substantial and adverse change in the physical environment); (2) significant or potentially significant (substantial, or potentially substantial, adverse changes in any of the physical conditions within the area affected by the project, for which mitigation measures must be recommended if feasible); and (3) significant and unavoidable (substantial or potentially substantial adverse effects on the environment that cannot be feasibly reduced with mitigation measures to a less-than-significant level). Cumulative impacts of the proposed project and of the Haul Route Alternative are described in Chapters 16 and 17, respectively, of this EIR. Growth inducing impacts that would occur with implementation of the proposed project or of the Haul Route Alternative are considered in Chapter 18, Other CEQA-Required Sections. Similarly, significant unavoidable environmental impacts of the proposed project and of the Haul Route Alternative are described in Chapter 18.

Table 3-1, at the end of this chapter, presents a description of the environmental impacts of both the proposed project and the Haul Route Alternative; the level of significance of each impact before mitigation; mitigation measures for significant and potentially significant impacts; and the level of significance of each impact after mitigation.

**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<b>CHAPTERS 4–16. IMPACTS OF AND MITIGATION MEASURES FOR THE PROPOSED PROJECT</b>				
<b>4 LAND USE</b>				
4-1	<b>Conversion of Farmland.</b> Phases 4, 5, and 6 of the proposed mine expansion would convert approximately 254 acres of State-designated Important Farmland, successively removing the Farmland from production for up to 20 years per phase. Phases 4, 5, and 6 of the proposed mine expansion would temporarily convert approximately 96 acres of NRCS-designated Prime Farmland to nonagricultural uses, successively removing NRCS-designated Prime Farmland from production for up to 20 years per phase. This impact is considered significant.	S	<u>Mitigation Measure P4-1: Reclaim Farmland in Accordance with Mine Reclamation Plan.</u> The applicant shall implement the following mitigation measures to reduce impacts related to Farmland conversion:	SU
			a) The applicant shall reclaim the same acreage of state-designated and federally designated Farmland as is converted by the mining project (estimated at 254 acres). Of this total, 155 acres shall be reclaimed onsite, and the remainder (approximately 99 acres) may be reclaimed offsite within Placer County on land currently zoned as Farm (F). The applicant may either purchase the offsite reclamation property in fee or through acquisition of a conservation easement.	
			b) The applicant shall perform the agricultural reclamation consistent with §6.6.5 (and all other applicable sections) of an approved mine reclamation plan for the proposed	

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			<p>project. The agricultural reclamation shall meet the following performance standards:</p> <ul style="list-style-type: none"> <li>► The reclaimed walnut orchard land shall produce approximately 1.7 tons of walnuts per acre or more for 2 consecutive crop years. Should the crops grown on the reclaimed land be other than walnuts (existing crop), the performance standard shall be the productivity rate for that crop based on the productivity in the area.</li> <li>► The reclaimed rice land shall produce approximately 3.8 tons of rice per acre or more for 2 consecutive crop years. Should the crops grown on the reclaimed land be other than rice (existing crop on portions of the expansion area), the performance standard shall be the productivity rate for that crop based on the productivity in the area.</li> </ul>	

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			<p><u>Mitigation Measure R4-1(a): Schedule Phasing of Land Preparation, Irrigation Water Development, and Crop Plantings, and Submit Annual Monitoring Report.</u> The applicant shall implement the following measures:</p> <ul style="list-style-type: none"> <li>► Before the start of mining in each phase of the proposed expansion areas, the applicant shall submit to the Placer County Planning Department for review and approval a schedule for land preparation, irrigation water development, and crop plantings such that the farmland reclamation will be phased to correspond with the mining activities as land is displaced over the mining period.</li> <li>► The applicant shall also prepare and submit an annual monitoring report to Placer County, summarizing progress toward planting and the annual yields in the areas reclaimed for agriculture.</li> <li>► A letter of credit or cash deposit in the amount of 12.5 percent of the cost to monitor shall be deposited with the Placer County Planning Department to ensure</li> </ul>	

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			<p>performance of the monitoring program.</p> <p>Evidence of this deposit shall be provided to the satisfaction of the Placer County Development Review Committee (DRC). Violation of any components of the approved monitoring program may result in enforcement activity in accordance with Placer County Environmental Review Ordinance §18.28.070.</p> <p><b>Mitigation Measure R4-1(b): Soil Handling and Reclamation.</b> The applicant shall implement the following measures during farmland soil handling and agricultural reclamation activities in Phases 4, 5, and 6 to promote effective soil reclamation:</p> <p>a) Soil removal and handling shall be monitored by a soil scientist experienced in soil reclamation. Soil removal and handling shall comply with the following guidelines:</p> <ul style="list-style-type: none"> <li>► Soil compaction shall be minimized by drying the soil before removal for stockpiling.</li> </ul>	

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			<ul style="list-style-type: none"> <li>► Soil shall be removed in maximum depths per pass to minimize traffic and impacts on the soil during the soil removal and replacement process. Traffic on the stockpiles shall be minimized as well.</li> <li>► The surface soil (fine brown silt about 10 feet to 18 feet thick) shall be salvaged and, if necessary, stockpiled separately from the subsoils in accordance with Article 9 reclamation standards, §3704(c).</li> <li>► The topsoil stockpiles shall be planted with a suitable cover crop mix if left for more than one mining season. This shall reduce erosion and help maintain aeration and microbiological activity. The cover crop mix selected shall include plants that grow in summer and winter.</li> </ul> <p>b)</p> <p>Soil reconstruction shall be directed by a qualified soil scientist experienced in soil reclamation. Deep tillage (ripping) will be required as the stockpiled soils are reconstructed. The chemical status, organic</p>	

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			<p>matter, and bulk density of the topsoil shall be evaluated after the soils have been reconstructed and leveled. Soil treatments and fertilizer requirements shall be decided after soil reconstruction.</p> <p>c) A crop plan shall be prepared by a qualified soil scientist in conjunction with a qualified restoration specialist. The crop plan shall include the following elements:</p> <ul style="list-style-type: none"> <li>► Deep-rooted cover crops are recommended as the first crop after reclamation to improve soil structure, organic matter, and microbial activity. The topsoil chemical status and organic matter shall be evaluated in the agricultural fields following planting of the cover crop. The soils could be cropped in a rotation of forage crops such as seed oats, silage corn, and oat hay.</li> <li>► The exposed slopes around the irrigated agricultural fields shall be planted to suitable plant species for erosion control and some habitat purposes.</li> </ul>	

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		<p>d) A soil reclamation monitoring report, prepared by a qualified soil scientist or similar professional, shall be submitted annually to the Placer County Planning Department. The report shall discuss the progress of the soil reclamation plan, soil removal and handling, soil reconstruction, and crop yields. The report shall identify any measures to improve soil reclamation. A report shall be prepared annually until the Article 9 reclamation standards of the SMARA are achieved.</p> <p><b>Mitigation Measure R4-1(c): Establish Permanent Agricultural Preservation Easement on Reclaimed Farmland.</b> The applicant shall establish a 254-acre permanent agricultural preservation easement on the reclaimed farmland or on other agricultural land within Placer County, subject to approval of the Placer County Planning Department. Such areas shall be established by recorded permanent easement or other instrument subject to the approval of the Placer County Planning Department. The applicant shall guarantee the maintenance of the land in a safe and orderly manner through a recorded easement or financial</p>		

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
4-2	<p><b>Land Use Incompatibility.</b> The proposed mine expansion project would expand land uses that could be incompatible with agricultural and residential land uses in the vicinity of the proposed project. This impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure R4-2: Rezone to Include Project Site in Special Purpose Combining Zone Counsel District.</b> Placer County will amend the farming zone designations on the project site to include a Special Purpose (-SP) combining zone district. Placer County is also considering amending the farming zone designations on nearby parcels to include a Special Purpose (-SP) combining zone district on those parcels. A -SP combining district is created when:</p> <p>mineral extraction operations...are of such importance to the health, safety, economy, and general welfare of the public that special consideration of the issue of land use must be afforded such uses. The special purpose combining zone is created to identify specific areas in the vicinity of such uses where land use compatibility issues are of particular importance...</p> <p>When applied to a particular parcel of land, the purpose of the district is to require a discretionary review</p>	SU

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			<p>of the proposed use of that land and to restrict the use of that land to uses that are determined to be compatible with the special use in the vicinity. (Placer County Zoning Ordinance §17.52.130)</p> <p>This zoning designation will require the landowners to obtain discretionary land use permits in the form of either a conditional use permit, minor use permit, or administrative review of any offsite activities to reduce possible conflicts between the proposed project and incompatible land uses. The SP combining district will extend 500 feet from the perimeter of the mining and processing operations. Placer County also can record notices on property titles indicating that the property is in the vicinity of an active mine. These notices will serve as disclosure to future owners and residents.</p> <p>It should be noted that the County uses the Special Purpose (-SP) combining zone district to prevent land use conflicts at various locations throughout the county, including the County landfill, airports, wastewater treatment plants, and mines. Application of the -SP zone provides the County</p>	

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			with discretionary authority to review the location and orientation of residential structures and outbuildings. The County has required individuals to relocate proposed residential structures to provide larger buffers (setbacks) on their parcel than required under the base zoning; however, the County has never denied a request to construct a home in the -SP zone if the home can be constructed to meet all other County requirements. It is conceivable, however, that such a denial could occur. (Thompson, pers. comm., 2004.)	
4-3	<u>Consistency with Placer County General Plan and Zoning Ordinance.</u> The proposed project would be consistent with the Placer County General Plan and Zoning Ordinance. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
4-4	<u>Consistency with Yuba County General Plan Policies and Zoning Ordinance.</u> The proposed project would be consistent with applicable Yuba County General Plan policies and the zoning ordinance. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS

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<b>5 VISUAL RESOURCES</b>				
5-1	<u>Potential Short-term Degradation of Views as a Result of Site Preparation for the Asphalt Batch Plant.</u>	LTS	No mitigation measures are necessary.	LTS
5-2	<u>Potential Long-term Degradation of Views as a Result of Mine Expansion and Asphaltic Concrete Production.</u>	PS	<u>Mitigation Measure R5-2: Prepare a Landscape Buffer Planting Plan.</u> The applicant shall prepare a landscape buffer planting plan for review and approval by the Placer County Planning Department 11 years before initiation of mining at Phase 6. The landscape buffer shall consist of 15-gallon (minimum size), 6-foot-tall (minimum height) evergreen trees, and shall be planted in the location shown in Exhibit 5-9. The trees shall be planted in a staggered fashion from 15 feet to 20 feet on-center 10 years before initiation of mining at Phase 6.	LTS

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		Mitigation	Significance		
	topography, and would not substantially degrade the visual character of the Patterson mine site or the surrounding area. The project includes a 100-foot landscape buffer strip to screen views of Phase 6 mining and reclamation activities. If the landscape strip were not effective in screening close-up views of Phase 6 from Camp Far West Road, the proposed project could substantially degrade the existing visual character of the project site during Phase 6 mining and before reclamation of the area back to a rice field (2–3 years). This impact is considered potentially significant.				
5-3	<b>New Source of Nighttime Lighting.</b> The proposed asphalt batch plant would introduce a new source of lighting to the mine site. Phase 6 mining activities would occur as close as 100 feet from Camp Far West Road, and would be visible from some nearby residences. This impact is considered potentially significant.	PS	<b>Mitigation Measure R5-3: Comply with Placer County Design Guidelines.</b> Except as described below, lighting fixtures within the project site, including those used for the asphalt batch plant and Phase 6 mining activities, shall comply with guidelines provided in the <i>Placer County Design Guidelines Manual</i> . These guidelines include:	LTS	

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures
			Significance After Mitigation
		C.	<p>Lighting shall be directed away from adjacent roadways and shall not interfere with traffic or create a traffic hazard.</p> <p>Upward lighting shall be minimized to the greatest extent possible.</p> <p>Outdoor lighting associated with the proposed mine expansion project shall adhere to the following guidelines to minimize light and glare to surrounding areas.</p> <ol style="list-style-type: none"> <li>Parking lot and other security lighting shall be top and side shielded to prevent the light pattern from shining onto adjacent property or roadways, excluding lights used for illumination of public roads.</li> <li>External lights used to illuminate the side of a building or wall shall be shielded to prevent the light from shining off the surface intended to be illuminated. Bottom lighting shall be prohibited.</li> </ol>

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>3. Lights that shine onto a road in a manner that causes excessive glare and may be considered to be a traffic hazard shall be prohibited.</p> <p>4. Outdoor floodlights shall not be projected above the horizontal plane.</p> <p>5. Lighting or outdoor display areas shall be turned off within 1 hour after the closing of the operation. Security lighting may remain on after the close of business.</p>	<p>As described by Occupational Safety and Health Administration (OSHA) and Mine Safety and Health Administration (MSHA) regulations, lighting fixtures along walkways and travelways shall be exempt from these guidelines.</p>
<b>6 PUBLIC SERVICES (FIRE PROTECTION AND EMERGENCY SERVICES)</b>				LTS
6-1	<b>Potential for Increased Response Times.</b> The proposed mine expansion project would not result in increases in response times when compared with current conditions. Mine-related activities including mining, processing, and reclamation would occur on the Patterson mine site. In addition, the production rates with the proposed asphalt		No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
	batch plant would not change substantially from the existing operation, and therefore would not create any additions of mine-related truck trips to local roadways. This impact is considered less than significant.			
6-2	<b>Potential Increased Need for Long-term Fire Protection and Emergency Response Services.</b> The proposed project would not substantially increase the need for fire protection and emergency response services over existing conditions and is not expected to require the construction of new fire or emergency service facilities. Because the proposed average annual production rate would be reduced from existing rates, the overall number of mine-related truck trips on local roadways would not increase; therefore, accidents involving mine-related trucks are not expected to increase. As with any industrial facility, fires or accidents could occur occasionally at the new asphalt batch plant. However, fire accidents at the mine site are not expected to increase substantially in frequency beyond existing conditions. The proposed project is not expected to require additional fire protection or emergency equipment or services beyond those required for the existing mining operation. The proposed project therefore would not substantially increase the need for additional fire protection or emergency services or facilities. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<b>7</b>	<b>TRAFFIC</b>			
7-1	<b>Potential Decline in Levels of Service in Sheridan.</b> Traffic volumes occurring as a result of existing-plus-project conditions under either the AAPR or the MAPR scenario would not worsen the overall intersection LOS at intersections in Sheridan. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
7-2	<b>Potential Decline in Levels of Service in Lincoln.</b> Traffic volumes occurring as a result of existing-plus-project conditions would not worsen the LOS at the SR 65/SR 193 intersection in Lincoln to LOS E or worse. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
7-3	<b>Potential Decline in Levels of Service in Sheridan (2020 Conditions).</b> Traffic volumes occurring as a result of 2020-plus-project conditions under either the AAPR or the MAPR scenario would not worsen the overall intersection LOS at intersections in Sheridan. In addition, traffic volumes occurring as a result of the 2020-plus-MAPR condition would not worsen the overall intersection LOS at intersections in Sheridan. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
7-4	<b>Potential Decline in Levels of Service in Lincoln (2020 Conditions).</b> Traffic volumes generated by the proposed project under 2020 conditions would not worsen the LOS	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	at the SR 65/SR 193 intersection in Lincoln. This impact is considered less than significant.			
7-5	<p><b>Roadway Deterioration.</b> Trucks and other vehicles traveling to and from the project site would travel on County roads for about 30 more years than currently permitted by the existing CUP. Because the project would require pavement reconstruction on segments of Placer County's roadway system during the life of the new CUP, the project would result in a significant impact related to roadway deterioration.</p>	S	<p><b>Mitigation Measure R7-5: Contribute Fair Share Funding of Roadway Maintenance.</b> The applicant shall Contribute a fair share of funding for roadway pavement reconstruction along the Placer County-approved truck route between SR 65 and the project site during the life of the project extended by the new conditional use permit. An analysis will be conducted by Placer County DPW to estimate the life of the pavement along each segment of the truck route serving the project site based on the estimated truck volumes. Based on this analysis, an estimate shall be made of the cost to provide adequate pavement conditions for the life of the project's permit. Placer County DPW will identify a financing mechanism to ensure that adequate funding is available from the applicant when necessary pavement reconstruction is performed.</p>	LTS
<b>8 AIR QUALITY</b>				
8-1	<p><b>Short-Term Increases in Regional Criteria Pollutants and Precursors.</b> Estimated increases in onsite short-term construction-related emissions of NO<sub>x</sub> and PM<sub>10</sub> would</p>	S	<p><b>Mitigation Measure R8-1(a): Prepare and Implement a Construction Dust Mitigation Plan.</b> The applicant shall submit a construction</p>	SU

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
	exceed applicable thresholds. As a result, this impact is considered significant.		<p>dust mitigation plan to the PCAPCD for review and approval. The plan shall be deemed adequate and approved by the PCAPCD for mitigating onsite demolition and construction-generated emissions before any onsite demolition or construction activities begin. This plan shall specify the methods used to control dust and particulate matter, demonstrate the availability of needed equipment and personnel, and identify a responsible individual who can authorize the implementation of additional measures, if needed. Mitigation measures shall include the following or other equally effective measures, at a minimum:</p> <ul style="list-style-type: none"> <li>► All disturbed areas, including storage piles, that are not being actively used for construction purposes shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.</li> <li>► All onsite unpaved roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</li> <li>► All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>effectively controlled of fugitive dust emissions using application of water or by presoaking.</p> <ul style="list-style-type: none"> <li>▲ When materials are transported offsite, all material shall be covered and effectively wetted to limit visible dust emissions, or at least 6 inches of freeboard space from the top of the container shall be maintained.</li> <li>▲ All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring.</li> <li>▲ Following the addition of materials to, or the removal of materials from, the surfaces of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant.</li> <li>▲ Onsite vehicle speeds on unpaved surfaces shall be limited to 15 mph.</li> <li>▲ Wheel washers shall be installed for all trucks and equipment exiting from unpaved areas, or wheels shall be washed to remove</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>accumulated dirt before such vehicles leave the site.</p> <ul style="list-style-type: none"> <li>▲ All excavation and grading operations shall be suspended when fugitive dust exceeds PCAPCD Rule 228 fugitive dust limitations.</li> <li>▲ All trucks and equipment leaving the site shall be washed.</li> <li>▲ Areas subject to excavation and grading at any one time shall be limited to the fullest extent possible.</li> <li>▲ Water, or other dust suppressant approved for use by the PCAPCD, shall be applied to structures proposed for demolition at a rate that effectively limits the generation of fugitive dust.</li> <li>▲ Open burning of removed vegetation shall be prohibited during infrastructure improvements. Vegetative material shall be chipped or delivered to waste-to-energy facilities.</li> <li>▲ Idling time for all diesel-powered equipment shall be limited to 5 minutes.</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>► An operational water truck shall be onsite at all times. Water shall be applied to control dust as needed to prevent dust impacts onsite.</p> <p><b>Mitigation Measure R8-1(b): Properly Maintain and Use Off-Road Diesel Equipment.</b> To reduce short-term emissions from onsite mobile source construction equipment, (e.g., NO<sub>x</sub> and PM<sub>10</sub>), the applicant shall implement the following mitigation measures:</p> <ul style="list-style-type: none"> <li>► CARB-certified diesel-water emulsion fuel (e.g., PuriNo<sub>x</sub>), or fuels/technological improvements (e.g., diesel exhaust particulate traps) approved for use by the PCAPCD that achieve equivalent reductions, shall be used in all off-road construction equipment.</li> <li>► Onsite truck and equipment engines shall be maintained in good running condition, in accordance with manufacturers' specifications. Maintenance records demonstrating compliance shall be kept onsite by the applicant and shall be made available to Placer County upon request.</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p><b>Mitigation Measure R8-1(c): Control Visible Emissions from Off-Road Diesel-Powered Equipment.</b> To control visible emissions from off-road diesel-powered equipment, the applicant shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than 3 minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the PCAPCD shall be notified of the noncompliant equipment within 48 hours. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted to the PCAPCD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The individual conducting the survey shall be certified by CARB in evaluation of visible emissions. The monthly summary shall include the quantity and type of vehicles surveyed, as well as the dates of each survey. Survey reports demonstrating compliance shall be kept onsite by the applicant and shall be made available to Placer County upon request. The PCAPCD and/or other officials may conduct</p>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>periodic site inspections to determine compliance. Nothing in this measure shall supersede other PCAPCD or state rules and regulations.</p> <p><b>Mitigation Measure R8-1(d): Control Fugitive Dust Emissions from Haul Trucks on Public Roads.</b> The applicant shall pave the access road leading from Camp Far West Road to the processing plant. The applicant shall limit or expeditiously remove the accumulation of mud or dirt from the access road at least once every 24 hours when operations are occurring.</p> <p><b>Mitigation Measure R8-1(e): Control Fugitive Dust Emissions from Storage Piles During Mining of Phase 6.</b> The storage of overburden material within the area designated in this report as proposed Phase 6 shall be prohibited during periods when active mining or reclamation of this area is not occurring. Stockpiled materials shall be located at the greatest distance feasible from nearby residences and maintained in accordance with Mitigation Measure R8-1(a). An operational water truck shall be onsite at all times. Water shall be applied to control dust as needed to prevent dust impacts offsite.</p>	
8-2	<u>Long-term Increases in Regional Criteria Pollutants and</u>	S	<u>Mitigation Measure R8-2(a): Develop and</u>	SU

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<u>Ozone Precursors.</u> Operation of the proposed project would result in emissions of ROG, CO, and PM <sub>10</sub> that would exceed applicable thresholds and the proposed project's emissions would increase from some sources (i.e., asphalt plant and longer onsite haul of materials from some mine phases) compared to baseline conditions. As a result, this impact is considered significant.	<p><b>Implement an Operational Fugitive Dust Control Plan.</b> The applicant shall develop and implement a fugitive dust control plan for purpose of reducing project-related fugitive dust emissions associated with the long-term operation of the proposed project. The proposed plan shall include those measures identified in Mitigation Measure R8-1(a), at a minimum, and shall be submitted to and approved by the PCAPCD before implementation of the proposed project. This plan shall also specify that transport and placement of overburden to the settling pond located along the northern boundary of the Phase 1 mining area shall occur evenly over a 28-day period rather than a 14-day period.</p> <p><b>Mitigation Measure R8-2(b): Implement Measures to Reduce Onsite Mobile-Source and Stationary-Source Emissions.</b> The applicant shall implement the following measures:</p> <ul style="list-style-type: none"> <li>► The applicant shall comply with PCAPCD Rule 502, New Source Review, requiring, in part, that the applicant provide offsets for any increase in cumulative emissions of ROG, NO<sub>x</sub>, SO<sub>x</sub>, CO, and PM<sub>10</sub> associated with the operation of any new or modified</li> </ul>		

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<ul style="list-style-type: none"> <li>► emission sources, such as the proposed asphalt batch plant.</li> </ul> <p>The applicant shall install Best Available Control Technology to minimize emissions associated with the operation of the proposed asphalt batch plant, such as use of a fabric filter (baghouse) for control of particulate emissions. Fabric filters can reduce particulate emissions by 90–99 percent. In addition, both dry limestone injection into the asphalt dryer drum and the use of low-sulfur fuel have been found to be effective at reducing SO<sub>2</sub> emissions by an average of 90 percent and CO emissions can be reduced by an average of 50–90 percent with proper maintenance and adjustment of the burner in the dryer drum (AWMA 2000).</p> <ul style="list-style-type: none"> <li>► The applicant shall implement Mitigation Measures R8-1(b) and R8-1(c) described above.</li> <li>► The off-road diesel powered equipment used at this facility shall meet the emission standards for 2003 off-road equipment by</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>December 31, 2005. Any off-road diesel powered equipment that does not meet 2003 emission standards by December 31, 2005, shall be phased out by December 31, 2007. After 2005, at this facility the applicant shall purchase and use only equipment that meets the most recent emission standards for off-road diesel powered equipment available at the time of purchase.</p> <ul style="list-style-type: none"> <li>► The applicant shall offset any increase in project emissions associated with the proposed project through onsite control measures or participation in the PCAPCD's Offsite Mitigation Program. The applicant could pay an in-lieu fee to the PCAPCD on an annual basis to meet the emission-offset requirements.</li> </ul>	<p><b>Mitigation Measure R8-2(c): Install and Use a Conveyor Belt to Reduce Particulate Emissions.</b></p> <p>Before implementation of the proposed project, the applicant shall install an electricity-powered conveyor belt system for use during the proposed mining phases for the transport of run-of-pit material to the aggregate processing area. The</p>

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
8-3	<u>Localized Concentrations of Carbon Monoxide Emissions.</u> Vehicle trips attributable to the proposed mine expansion project would generate CO, a mobile-source pollutant of local concern. However, western Placer and Yuba counties are in compliance with ambient air quality standards for CO, and CO concentrations are not projected to exceed ambient air quality standards at intersections affected by the proposed mine expansion project.	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
8-4	<p>Therefore, this impact is considered less than significant.</p> <p><b>Localized Concentrations of Nitrogen Dioxide in the Vicinity of the Processing Plant.</b> Concentrations of NO<sub>2</sub> at nearby receptors could exceed either the California 1-hour ambient air quality standard or the NAAQS. As a result, this impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure R8-4: Implement Measures to Reduce Mobile-Source and Stationary-Source NO<sub>2</sub> Concentrations.</b> Before implementation of the proposed project, the applicant shall implement the following measures:</p> <ul style="list-style-type: none"> <li>► The existing diesel-powered water pump shall be converted to an electric-powered pump.</li> <li>► The applicant shall implement Mitigation Measures R8-1(b), R8-2(b), and R8-2(c) described above.</li> </ul>	SU
8-5	<p><b>Localized Concentrations of PM<sub>10</sub> in the Vicinity of the Processing Plant.</b> Implementation of the proposed project could result in an increase in PM<sub>10</sub> concentrations at nearby receptors that would exceed state or federal standards. Therefore, this impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure R8-5: Implement Measures to Reduce and Monitor PM<sub>10</sub> Concentrations.</b> The applicant shall implement the following measures:</p> <ul style="list-style-type: none"> <li>► The applicant shall prepare and submit an air monitoring plan to the PCAPCD 90 days before implementation of the proposed project, with monitoring to begin within 30 days of approval of the plan. The air monitoring plan shall include provisions to perform ambient air monitoring for PM<sub>10</sub> for a reasonable</li> </ul>	SU

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<ul style="list-style-type: none"> <li>► period of time to be determined by the PCAPCD.</li> </ul>	
8-6	<u><b>Particulate Deposition on Nearby Agricultural Crops.</b></u> The accumulation of dust on the leaves of nearby agricultural plants and orchards may result in reduced crop yields associated with decreased rates of plant photosynthesis and may affect the health of nearby sensitive plant species. This impact is considered significant.	S	<u><b>Mitigation Measure R8-6(a): Implement Measures to Reduce Particulate Deposition on Nearby Agricultural Crops and Orchards.</b></u> The applicant shall implement Mitigation Measures R8-1(a), R8-1(c), R8-1(d), R8-1(e), and R8-2(c) described above.  <u><b>Mitigation Measure R8-6(b): Implement Measures to Control Particulate Emissions From Off-Road Diesel Equipment.</b></u> The applicant shall implement Mitigation Measures R8-1(c), R8-1(d), R8-2(b), R8-2(c), and R8-4 described above.	SU

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
8-7	<u>Matter in the Vicinity of the Processing Plant.</u> Predicted airborne concentrations of diesel exhaust particulate matter would result in an increased cancer risk to nearby sensitive receptors exceeding applicable standards. Implementation of the proposed project would extend the period of exposure by up to 30 years. Extended exposure to diesel exhaust can result in cancer, respiratory effects, and other health problems, and longer exposure periods can increase the risk of contracting diesel-related health problems. Therefore, this impact is considered significant.	S	<u>Mitigation Measure R8-7: Implement Measures to Reduce Concentrations of Diesel Exhaust Particulate Emissions.</u> The applicant shall implement Mitigation Measures R8-2(c) and R8-4 described above.	SU
8-8	<u>Localized Concentrations of Diesel Exhaust Particulate Matter within Sheridan.</u> Implementation of the proposed project would result in reduced haul truck traffic along the existing haul route and corresponding reductions in mobile source diesel exhaust particulate matter. The proposed project, however, would extend the period of exposure by up to 30 years; therefore, this impact is considered significant.	S	No mitigation measures are available to reduce this impact.	SU
8-9	<u>Airborne Concentrations of Asbestos Fibers.</u> The project site is not located within an area mapped by the State as likely having an occurrence of asbestos-containing mineral deposits. In addition, onsite geologic reconnaissance of the proposed expansion areas has not identified any onsite	LTS	No mitigation measures are necessary.	LTS

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Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative				
Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	deposits of aggregate that contain asbestos. This impact is considered less than significant.			
8-10	<b>Increases in Detectable Odors at Nearby Receptors.</b> Implementation of the proposed project may result in increased concentrations of odorous emissions and an increased frequency of occurrence at nearby sensitive receptors. As a result, this impact is considered potentially significant.	PS	<b>Mitigation Measure R8-10: Implement Measures to Decrease Detectable Odors at Nearby Receptors.</b> The applicant shall implement Mitigation Measures R8-2(b) and R8-2(c).	SU
8-11	<b>Airborne Concentrations of Crystalline Silica.</b> Future mining activities within the expansion areas may result in emissions of crystalline silica. As a result, this impact is considered potentially significant.	PS	<b>Mitigation Measure R8-11: Implement Measures to Decrease Airborne Concentrations of Crystalline Silica.</b> The applicant shall implement the following measures:	LTS
			<ul style="list-style-type: none"> <li>► The applicant shall prepare and submit an air monitoring and operational response plan to the PCAPCD 90 days before implementation of the proposed project, with monitoring to begin within 30 days of approval of the plan. The air monitoring plan shall include provisions to perform ambient air monitoring for crystalline silica in accordance with approved methods and for a period of time to be determined by the PCAPCD. If an approved method for monitoring crystalline silica is not available, then the plan shall state that sampling will</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>commence as soon as an approved method is identified. If, during monitoring, airborne crystalline silica is identified, the applicant shall consult with the PCAPCD to determine feasible mitigation measures to be implemented to ensure that health risks to sensitive receptors remain within established acceptable levels of risk.</p> <ul style="list-style-type: none"> <li>► If a crystalline silica unit risk value is adopted by CARB during the life of the project, the applicant shall comply with the AB 2588 facility prioritization and health risk assessment requirements.</li> </ul>	
<b>9 NOISE</b>	<u><b>Short-term Construction Noise Levels Exceeding Permissible Limits.</b></u> Construction operations (onsite construction of an office building, an extended levee, and an asphalt batch plant) are not limited to the hours exempt from the permissible noise limits set forth in the applicable noise standards (7 a.m.–7 p.m.), and construction noise could exceed permissible limits. Therefore, this impact is considered <b>potentially significant</b> .	PS	<u><b>Mitigation Measure R9-1: Implement Measures to Reduce Short-term Construction Noise Levels.</b></u> The applicant shall implement the following measures: <ul style="list-style-type: none"> <li>► Construction operations shall be limited to the hours between 7 a.m. and 7 p.m., Monday through Friday.</li> <li>► Construction equipment shall be properly maintained and equipped with noise</li> </ul>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
9-2 <b>Operational Mining and Processing Noise Levels Exceeding Recommended Thresholds.</b> Predicted existing plus project onsite operational noise levels would result in an increase in noise levels in comparison to existing conditions and exceed the recommended thresholds. As a result, this impact is considered significant.		S	<u>Mitigation Measure R9-2: Implement Measures to Reduce Operational Mining and Processing Noise Levels.</u> The applicant shall implement the following measures: <ul style="list-style-type: none"> <li>a) Mining equipment shall be properly maintained and equipped with noise control devices, such as mufflers and engine shrouds, in accordance with manufacturer specifications.</li> <li>b) Mining and reclamation operations in Phases 1–6 shall be limited to hours between 7 a.m. and 10 p.m.</li> <li>c) An earthen landscaped berm shall be constructed on the south and east perimeter of Phase 6.</li> <li>d) Phase 6 mining shall commence in the northwest portion of this phase.</li> <li>e) Provide acoustical treatment of residential buildings that would remain significantly impacted by the proposed project after implementation of the noise mitigation</li> </ul>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
9-3	<b>Increase in Operational Highway Traffic Noise.</b> Predicted noise levels at noise-sensitive receptors located along the existing haul route would exceed the 60 dBA Ldn standard. However, the predicted plus project noise levels do not result in an increase in noise levels compared to baseline conditions. As a result, this impact is considered less than significant.	LTS	measures listed above..	LTS
9-4	<b>Increases in Nighttime Intermittent Single-Event Noise Levels.</b> Potential increases in nighttime intermittent single-event noise levels from onsite mining operations may result in increased levels of sleep disruption to occupants of residential dwellings located near the mine. As a result, this impact is considered potentially significant.	PS	<u>Mitigation Measure R9-4: Implement Measures to Reduce Single-Event Noise Levels.</u> The applicant shall implement Mitigation Measure R9-2, described above, to reduce SEL associated with the proposed project.	LTS
9-5	<b>Exposure to Operational Noise Exceeding Applicable Thresholds During Temperature Inversion and Windy Conditions.</b> Under temperature inversions and windy conditions, noise levels from operational and mining/reclamation activities at the nearby sensitive receptors could exceed applicable thresholds. This impact is considered potentially significant.	PS	<u>Mitigation Measure R9-5: Implement Measures to Reduce Atmospheric Effects.</u> The applicant shall implement Mitigation Measure R9-2, described above, to reduce atmospheric effects of the proposed project.	LTS
10-1	<b>Erosion of Reclaimed Slopes.</b> The proposed reclamation	PS	<u>Mitigation Measure P10-1: Implement Best</u>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>activities would result in the construction of fill slopes with a mantle of processing fines that could be highly erosive. These fill slopes could experience substantial erosion and therefore could affect water quality. This impact is considered potentially significant.</p> <ul style="list-style-type: none"> <li>▲ Vegetation removal shall not precede mining by more than 12 months.</li> <li>▲ All fill slopes shall be designed and constructed in accordance with the requirements of the UBC to minimize the potential for slope instability and erosion and shall not exceed a steepness of 2.25:1.</li> <li>▲ Vegetative cover material (soil) shall be placed (at a thickness of 6 inches) on reclaimed valley floor and mine slopes and revegetated as it is placed. Seeds for vegetative cover shall be broadcast with a mechanical spreader in the early fall, and covered with soil immediately following broadcasting.</li> <li>▲ Final graded fill slopes shall be tracked with machinery to provide grooves to minimize sheetflow velocity and catch seeds</li> </ul>			

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>transported in runoff.</p> <ul style="list-style-type: none"> <li>▲ Straw mulch shall be spread over revegetation areas before and after seeding/planting. The mulch shall be spread or blown to create a cover depth of 2–3 inches at a rate of 2 tons/acre. Straw mulch shall be anchored by punching the mulch into the growth media with a roller punch or crimper punch.</li> <li>▲ Silt fencing shall be installed near the toe of any fill slopes with exposed (unvegetated) soil.</li> <li>▲ Contour furrows (shallow ditches) shall be constructed or straw wattles (rice straw wrapped in tubular plastic netting) shall be placed along contour on final graded fill slopes at a minimum spacing of 50 feet (slope distance) on levee slopes to minimize runoff velocity and catch seeds transported in runoff.</li> <li>▲ Reclamation plants will be watered (irrigated) if necessary using a water truck to promote plant growth before the onset of re-vegetation.</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>► of seasonal rains.</li> </ul>	<p>Pursuant to §2773 of SMARA, the reclamation revegetation shall be monitored for 3 years to ensure success in establishment of adequate cover for erosion control. The performance standard for seeded areas shall be 80 percent vegetative cover with no bare areas larger than 10 feet by 10 feet.</p> <p><b>Mitigation Measure R10-1: Direct Runoff from the Top of Excavated Slopes.</b> The applicant shall perform grading in a manner that directs runoff away from the top of excavated slopes and into controlled drainage conveyance structures.</p>	
10-2	<p><b>Unstable Fill Materials.</b> Placement of fill at the project site could result in areas of unstable geotechnical conditions, such as liquefaction and landslides. New structures, such as the asphalt batch plant, constructed at locations with unstable conditions could be affected by liquefaction. Therefore, this impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure P10-2: Prepare a Geotechnical Engineering Report for Foundations.</b> If new structures, including the asphalt batch plant, are proposed in backfilled areas of the site, the applicant shall prepare a geotechnical engineering report to resolve potentially unstable soil conditions for foundations in areas of fill. The geotechnical investigation shall include subsurface testing of soil and groundwater conditions at the location of proposed structures and determine appropriate foundation designs that are consistent</p>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>with the California UBC. Final design of the proposed asphalt batch plant shall incorporate the results of the geotechnical engineering report.</p> <p><b>Mitigation Measure R10-2: Identify Unstable Fill Materials.</b> Before final site reclamation associated with the proposed mine expansion project, the applicant shall identify all filled sediment basins or other areas of uncontrolled fill at the site on a sealed map, and shall include this information in the deed restriction for the project site to allow recognition of these areas as potentially unstable for future construction of new structures.</p>	<p>LTS</p> <p><b>Mitigation Measure R10-3: Implement Erosion Control Measures.</b> The applicant shall implement the following mitigation measures to ensure the preservation of the land separating the active channel of the Bear River from the lowered mining and reclaimed mining areas north of the river:</p> <ul style="list-style-type: none"> <li>► The offsite portion of this mitigation measure only applies if the owners of offsite lands provide permission to enter their lands after the project applicant has made good-faith efforts to obtain such permission. During the mining and reclamation period, a licensed engineer or</li> </ul>
10-3	<p><b>Potential Pit Capture From Separator/Levee Erosion and Instability.</b> Lateral migration of the Bear River channel could result in destabilization of the riverward side of the proposed levee extension at the Patterson mine site. Erosion or slope failure along the levee could result in "pit capture" of the proposed mine pit and reclaimed areas. Therefore, this impact is considered <b>potentially significant</b>.</p>	PS		S = Significant SU = Significant and Unavoidable

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>certified engineering geologist shall annually inspect the banks of the Bear River within the project site boundaries to determine whether significant bank erosion or potential for bank erosion has developed. Significant bank erosion shall be indicated by erosion and oversteepening of the riverward toe of the levee slope or more than four feet of lateral erosion of the stream bank. Identification of significant erosion at the project site shall require the development of a remedial action plan. The plan shall, to the extent feasible, incorporate biotechnical bank protection technologies. The plan shall be submitted to Placer County for review and approval before excavation of the area southwest of the existing mining operation. A report of the bank inspection (including any recommendations for remedial actions) shall be submitted to Placer County by July 1 of each year. Following Placer County approval, recommended remedial actions shall be implemented within 1 year of obtaining all necessary permits or approvals required for the remedial action.</p>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<ul style="list-style-type: none"> <li>► Following completion of reclamation, Placer County will inspect the separator between the mining area and the Bear River once every 5 years, and after any major flow event exceeding a 5-year flow, to determine whether significant bank erosion threatens or has the potential to threaten the integrity of the separator. If Placer County determines that damage requires repair to meet the intended performance of the separator, the applicant shall perform the required repair.</li> </ul>	
10-4 <u>Potential Cut Slope Instability Adjacent to Existing Irrigation Canal.</u> Cut slopes created during mining could be potentially unstable. Cut slope failure along the northern margin of the project site could damage the existing irrigation canal. This impact is considered potentially significant.		PS	<u>Mitigation Measure P10-4: Minimize Potential for Damage to the Existing Irrigation Canal.</u> The applicant shall implement the following mitigation measures to minimize the potential for damage to the existing irrigation canal related to failure of mining cut slopes:	LTS <ul style="list-style-type: none"> <li>► Excavation of mining slopes shall not occur less than 50 feet from the existing irrigation canal located at the northern margin of the project site.</li> <li>► Mining slopes shall not exceed a steepness</li> </ul>

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>of 2:1 above a depth of 35 feet and 1.75:1 below 35 feet. These slopes are expected to have a factor of safety of 1.5 or greater (Carlton Engineering, Inc., 2003).</p> <ul style="list-style-type: none"> <li>► The mining pits adjacent to the irrigation canal shall be backfilled to approximate existing grade, forming a 500-foot-wide buttress fill adjacent to the canal.</li> </ul>	
10-5	<u>Potential Paleontological Resources.</u> No known paleontological resources occur within the top 60 feet of unconsolidated sand and gravel deposits at the proposed mine expansion area. However, excavation into consolidated Pleistocene sediments at any depth could result in the disturbance of paleontological resources. This impact is considered <b>potentially significant</b> .	PS	<u>Mitigation Measure R10-5: Minimize Potential for Damage to Unknown Paleontological Resources.</u> The applicant shall implement the following mitigation measure to minimize the potential for damage to paleontological resources: <ul style="list-style-type: none"> <li>► In the event that paleontological resources are discovered during land alteration activities, the mining crew shall immediately cease work in the vicinity of the find. A qualified paleontologist approved by Placer County shall be consulted to evaluate the resource, and a mitigation plan shall be prepared in accordance with local and Society of Vertebrate Paleontology guidelines.</li> </ul>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
11-1 <u>Flooding of Active Mining Areas or Reclamation Features.</u> Portions of the Patterson mine site are located within the 100-year flood hazard zone as defined by FEMA and site-specific hydraulic analysis. The lowered surfaces created by implementation of the proposed mine expansion project would be permanent and the potential impacts associated with breaching of the levees would persist following reclamation. Inundation of the proposed off-channel mining pits could result from damage to the levee separating the mining pits from the Bear River. Flooding of the processing plant site could result in damage to structures or equipment, including the proposed asphalt batch plant, and possible injuries to site workers. Following completion of reclamation, reclamation features including the oak woodland and elderberry restoration areas could be damaged by erosion and flooding. This impact is considered <b>potentially significant</b> .	PS	<u>Mitigation Measure R11-1: Provide Flood Control.</u> The applicant shall implement the following mitigation measures: <ul style="list-style-type: none"> <li>► Within 6 months of project approval, the reclamation plan shall be revised to ensure that the proposed levee extension provides 500-year flood protection for the proposed mining and reclamation areas north and south of the river. The reclamation plan shall also be revised to include raising of the existing levees north of the Bear River to provide 500-year flood protection for the proposed reclamation areas. Revised levee designs shall be submitted to the Development Review Committee for review and approval.</li> <li>► Within 6 months of project approval, the mine reclamation plan shall be revised to relocate the extended levee to a position 100 feet north of the proposed location to reduce the potential for levee erosion.</li> <li>► A licensed engineer under contract to the applicant shall inspect the project site following any flood exceeding the 50-year flood event to assess any damage to levees.</li> </ul>	LTS	SU = Significant and Unavoidable

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>A report detailing site conditions and recommending any necessary remedial actions shall be prepared and submitted to the Development Review Committee. All remedial actions shall be implemented at the expense of the applicant before the onset of the following rainy season (November 1), or within a timeframe agreed upon by affected permitting agencies including the Development Review Committee.</p> <ul style="list-style-type: none"> <li>► If required by the California Division of Safety of Dams (DSD) before the commencement of mining below the groundwater level in the proposed expanded mining area, the applicant shall contact the DSD and the Reclamation Board for a determination on whether proposed levees or alluvial separators that would be created by the project fall under the jurisdiction of these agencies. If these project features fall under agency jurisdiction, the applicant shall demonstrate compliance with any applicable permitting requirements.</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
11-2	<p><b>Potential for Increased Runoff from Additional Impervious Surfaces.</b> The development associated with the proposed project would result in changes in the amount of impervious surfaces and water storage basins at the project site. However, a comparison of pre-development and postdevelopment stormwater discharges indicates that although runoff volumes would increase under postdevelopment conditions, the runoff storage capacity of created ponds would offset the runoff volume increases resulting in a net decrease in runoff volumes from the site. This impact is considered less than significant.</p>	LTS	No mitigation measures are necessary.	LTS
11-3	<p><b>Excavation of Mining Pits Below the Groundwater Table.</b> The applicant has proposed continued excavation of mining pits below the shallow groundwater table and reclamation of portions of the mining pits to permanent ponds. Groundwater flow into the pits would result in temporary disruption of groundwater flow patterns and possible localized lowering of groundwater levels. Pumping rates or efficiency of nearby water supply wells could be adversely affected. This impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure R11-3: Perform Water Supply Well Monitoring and Improvement.</b> The applicant shall implement the following mitigation measures before initiation of mining in the Phase 6 area south of the Bear River:</p> <ul style="list-style-type: none"> <li>► The applicant shall make a good-faith effort to obtain well owner permission to conduct, or provide compensation in exchange for, pump performance testing at all water supply wells within 2,000 feet of proposed mining areas. The testing shall be performed in early spring (high groundwater conditions) and fall (low groundwater conditions) to establish</li> </ul>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>background pump performance. The testing shall be conducted by a qualified pump specialist and shall establish well yield and overall pumping efficiency. Additionally, the depth, well seal, and screened interval of the well and the condition of the pump shall be determined.</p> <ul style="list-style-type: none"> <li>► If a well owner within 2,000 feet of Phase 6 who agreed to the above specified baseline testing files a complaint of poor pump performance during Phase 6 activities, pump performance testing shall be conducted at the allegedly affected well by a qualified pump performance specialist. If a reduction in pump performance is found, the pump specialist shall determine the most likely cause of the reduction and submit a written report to Placer County Environmental Health Services. The report shall be reviewed by a Certified Hydrogeologist appointed by Placer County. If the determination indicates that an adverse effect on pumping has been caused by reduction in groundwater levels that can be attributed to mining activities, Placer County Environmental Health</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
11-4 <u>Reduction of Reclaimed Lake Levels as a Result of</u>		PS	<u>Mitigation Measure R11-4: Ensure Design Lake LTS</u>	
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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p><b>Evaporation.</b> The proposed mine reclamation plan would result in the creation of 300 acres of additional open water in a wet pit lake, which would increase the rate of evaporative water loss from the site. The net loss is estimated to be 1,428 af/year. Based on available groundwater data, it is uncertain whether groundwater inflow would maintain the water elevation in the lake. If the lake level were to drop, lake margin habitat would be lost and there would be a risk of eutrophication. This impact is considered <b>potentially significant</b>.</p>		<p><b>Operating Level.</b> The applicant shall monitor and record surface water elevations within the mining pit proposed for the reclaimed lake. Elevations shall be monitored and recorded on a monthly basis in the period from June through October each year during and after the reclamation phase of the proposed project. Monitoring and recording shall continue throughout the reclamation activities, and for 10 years after the completion of lake restoration, to establish average monthly lake levels. If after the lake fills to capacity (indicated by stable water levels), lake levels decline to elevations 2 feet or more below the design operating level (95 feet msl) and depressed summer lake levels are observed for 2 consecutive non-drought years and the decrease is not because of nearby well pumping beyond the applicant's control, and the scientific data indicate that the project is the cause of these reductions, the applicant shall submit a corrective action plan prepared by a qualified professional engineer that quantifies the water budget (inputs and outputs) and identifies a reliable and available source of water to provide a supplemental water supply sufficient to maintain the design operating level year round.</p>	
11-5	<p><b>Sediment Loading Related to Levee Repair and Asphalt Batch Plant Construction.</b> Maintenance of the proposed</p>	PS	<p><b>Mitigation Measure R 11-5: Reduce Sediment Loading from Levee Repair and Asphalt Batch</b></p>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	Levee extensions and construction of the proposed asphalt batch plant could result in erosion of bare soil and release of sediment to the Bear River. Sediment loading could adversely affect water quality. This impact is considered potentially significant.		<p><b>Plant Construction.</b> The applicant shall implement the following mitigation measures to reduce the potential impacts associated with sediment loading during levee maintenance activities:</p> <ul style="list-style-type: none"> <li>► Levee maintenance activities shall be restricted to the period between April 1 and November 1 to avoid construction during the rainy season.</li> <li>► All riverward levee slopes shall be final graded and revegetated before November 1.</li> <li>► No grading activities for levee maintenance shall be performed within 25 feet horizontal of the active low-flow channel of the Bear River.</li> <li>► During the first year after reclamation of the levees, a sediment transport barrier (e.g., silt fences or staked bales) shall be placed along the toe of the riverward slope of the levee to minimize the potential for sediment transport into the Bear River.</li> <li>► A SWPPP shall be prepared and implemented for asphalt batch plant</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
11-6 <u>Increased Methyl Mercury Production in Reclaimed Lakes.</u> Mercury in surface and subsurface waters and sediment at the project site and within the Bear River watershed presents the potential for production and bioaccumulation of methyl mercury. The proposed lake may present conditions favorable to the formation of methyl mercury, and thus could present an increased risk to public health related to consumption of contaminated fish. This impact is considered potentially significant.	PS	<u>Mitigation Measure R11-6: Implement Mercury Monitoring Plan.</u> The applicant shall prepare a Mercury Monitoring Program (HgMP) and submit the plan to Placer County Environmental Health Services and the RWQCB before the start of mining in new expansion areas. The HgMP shall, at a minimum, provide for the following performance standards:	<ul style="list-style-type: none"> <li>► annual lake/pond condition profiling during the period from June through September, including measurements of pH, eH (or redox potential), temperature, dissolved oxygen, and total dissolved carbon;</li> <li>► annual collection of lake water, pond water, washwater, and sediment fines and analysis of collected samples for total mercury at a minimum detection limit of 0.001 <math>\mu\text{g/L}</math>; and</li> </ul>	LTS

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>If mean mercury levels in fish flesh exceed 500 µg/kg for 2 consecutive years, a qualified water quality engineer shall prepare a corrective action plan and submit it to Placer County Environmental Health Services and the Central Valley RWQCB. The plan shall include, at a minimum, the following mitigative actions:</p> <ul style="list-style-type: none"> <li>► annual collection from reclaimed ponds of a minimum of five predatory fish (e.g., largemouth bass) specimens and analysis of the specimens for mercury content in fish flesh at a minimum detection limit of 100 µg/kg.</li> <li>► Prohibit fishing in the affected lake/pond.</li> <li>► Post signs warning of potential health hazards associated with human consumption of fish taken from the affected lake/pond.</li> <li>► Present methods for reducing methyl mercury production including, but not limited to permanent aeration of bottom levels of the lake(s), alteration of water chemistry (e.g., increasing pH), or other</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>controls to reduce anaerobic bacteria populations. The HgMP shall be modified to incorporate approved corrective actions. The monitoring requirements for the HgMP (i.e., lake profiling, water sampling, and fish sampling) shall be continued after corrective actions are implemented.</p> <ul style="list-style-type: none"> <li>► Prohibit stocking of the lakes with predatory fish, including bass and catfish.</li> </ul> <p>Implementation of the corrective action plan will require approval by the Central Valley RWQCB, CDFG, and Placer County Environmental Health Services.</p>	
<b>12 BIOLOGICAL RESOURCES</b>				
12-1	<p><b>Loss of Sensitive Habitats.</b> The phased excavation for production of sand and gravel would result in the loss of sensitive habitats, including valley oak woodland and riparian woodland. The aquatic habitat associated with the Bear River is also considered sensitive but is outside of the proposed expansion area. The 365-acre proposed expansion area would result in phased removal of 101 acres of oak woodland that supports approximately 2,600 oak trees. Most of the oak woodland is valley oak woodland, which is a sensitive plant community. The expansion area also</p>	S	<p><b>Mitigation Measure P12-1: Implement Conceptual Biological and Woodland Mitigation Plan.</b> The applicant shall implement the biological mitigation plan and conceptual woodland mitigation plan prepared by North Fork Associates for the proposed mine expansion area (Appendix H), but updated to include the 5 acres of wetland expansion/enhancement proposed in the draft mine reclamation plan (North Fork Associates 2001b) (Carlton Engineering, Inc., 2003). The intent of</p>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	includes approximately 3 acres of riparian woodland. This impact is considered significant.		<p>these plans is to establish the mitigation framework for the ongoing reclamation of the site and to provide the basic mitigation/reclamation program for this EIR. Compensation for impacts on existing habitats shall be implemented incrementally in advance of actual impacts to minimize temporal losses of habitat. Key elements of the mitigation plans are outlined below.</p> <ul style="list-style-type: none"> <li>► The basic concept of the proposed mitigation plans is to create a valley oak-riparian woodland along the north side of the Bear River concurrent with future mining activity. The reclaimed habitat shall consist predominantly of valley oak but shall also contain numerous native associate species, including interior live oak, foothill pine, cottonwood, white alder, Oregon ash, and other riparian components. The woodland mitigation plan includes approximately 7,428 living oak trees on 212 acres at the end of the 60-year project. Trees shall be planted in five-year increments, beginning within 1 year of project approval with an initial planting of 773 trees, as described in the woodland mitigation plan.</li> </ul> <p>The restoration plan also includes establishing</p>	

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			<p>emergent marsh and riparian woodland in the mitigation area. At least 6 acres of riparian woodland shall be established. Emergent marsh vegetation shall be allowed to volunteer naturally on 53 acres of permanently inundated margin of a 300-acre lake that shall be the end use of an area in the western portion of the site. The draft mine reclamation plan also proposes 5 acres of wetland enhancement and expansion in the eastern portion of Phase 1 (Carlton Engineering, Inc., 2003).</p> <ul style="list-style-type: none"> <li>► The mitigation plan includes performance standards for all compensatory habitat, that shall be achieved:</li> </ul> <p><i>Oak Woodland/Oak Savanna/Riparian:</i> 80 percent survivability of trees, 50 percent survivability of native shrub species planted among the oaks.</p> <p><i>Riparian Woodland:</i> Establishment of a minimum of 6 acres of riparian woodland containing hydrophytic species in all strata (herb, shrub, subcanopy, and canopy).</p> <p><i>Emergent Marsh:</i> Establishment of emergent marsh vegetation along the lake fringe to an</p>	<p>LTS = Less than Significant      PS = Potentially Significant      S = Significant      SU = Significant and Unavoidable</p>

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>average width of at least 20 feet from the toe of the adjacent slope.</p> <p><i>Elderberry Habitat:</i> Per permit guidelines set forth in the <i>Conservation Guidelines for the Valley Elderberry Longhorn Beetle</i> (USFWS 1999). These guidelines include the following requirements:</p> <ul style="list-style-type: none"> <li>• Before commencement of project activities, an elderberry shrub survey shall be conducted by a qualified biologist. For elderberry shrubs to be avoided, a 100-foot buffer shall be established around elderberry shrubs with stems greater than 1 inch diameter at ground level and shall be clearly identified in the field by staking or flagging. No project activity shall occur within the buffer areas except for plants that are being relocated.</li> <li>• Mitigation of impacts on VELB may include, but not necessarily be limited to, implementation of reduced buffers around shrubs that would not be removed, transplanting shrubs to a conservation area, and planting additional seedling or cuttings</li> </ul>	

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			<p>at a ratio ranging from 1:1 or 1:6, depending on the number of stems greater than or equal to 1 inch and on whether beetle exit holes are found on the shrubs onsite.</p> <p><i>Open Water:</i> Approximately 247 acres of open water (approximately 53 acres of emergent marsh would compose the rest of the 300-acre lake). Four preservation areas, totaling 193 acres, shall be maintained throughout the mining operation, including three areas that support oak woodland. The fourth area shall protect a corridor along the Bear River.</p> <p><b>Mitigation Measure R12-1: Implement Mitigation Plan for Loss of Sensitive Habitats and Monitor Compliance.</b> The applicant shall implement the following mitigation measures to further reduce impacts on sensitive habitats on the project site and to comply with the Yuba County and Placer County general plans and the Placer County Tree Preservation Ordinance.</p> <ul style="list-style-type: none"> <li>► Before initiation of the mining in Phase 2, the conceptual woodland mitigation plan (North</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation												
			<p>Fork Associates 2004 shall be revised and expanded to include detailed information for proposed mitigation of the loss of sensitive habitat for each phase of mining within Yuba County (Phases 3 and 4). The mitigation plan shall identify the percentage of existing canopy cover of oak woodland in these phases of the proposed expansion area. The percentage of canopy cover to be retained within the project area, including permanent open-space areas, shall be calculated based on the standards required by the Yuba County General Plan, as shown below.</p> <table border="1" data-bbox="959 439 1318 925"> <thead> <tr> <th data-bbox="959 439 1318 925">Existing Canopy Cover, Including Permanent Open-Space Areas</th> <th data-bbox="959 439 1318 925">Percent Canopy Cover to be Retained with the Project, Including Permanent Open-Space Areas</th> </tr> </thead> <tbody> <tr> <td data-bbox="959 439 1318 756">80-100 percent</td> <td data-bbox="959 439 1318 756">60 percent of existing canopy</td> </tr> <tr> <td data-bbox="959 756 1318 925">60-79 percent</td> <td data-bbox="959 756 1318 925">70 percent of existing canopy</td> </tr> <tr> <td data-bbox="959 925 1318 1072">40-59 percent</td> <td data-bbox="959 925 1318 1072">80 percent of existing canopy</td> </tr> <tr> <td data-bbox="959 1072 1318 1220">20-39 percent</td> <td data-bbox="959 1072 1318 1220">85 percent of existing canopy</td> </tr> <tr> <td data-bbox="959 1220 1318 1368">19 percent or less</td> <td data-bbox="959 1220 1318 1368">90 percent of existing canopy</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>► The detailed mitigation plan shall include information on all specific criteria necessary to</li> </ul>	Existing Canopy Cover, Including Permanent Open-Space Areas	Percent Canopy Cover to be Retained with the Project, Including Permanent Open-Space Areas	80-100 percent	60 percent of existing canopy	60-79 percent	70 percent of existing canopy	40-59 percent	80 percent of existing canopy	20-39 percent	85 percent of existing canopy	19 percent or less	90 percent of existing canopy	
Existing Canopy Cover, Including Permanent Open-Space Areas	Percent Canopy Cover to be Retained with the Project, Including Permanent Open-Space Areas															
80-100 percent	60 percent of existing canopy															
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40-59 percent	80 percent of existing canopy															
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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>implement the mitigation plan. Details shall include information on specific plant palettes, irrigation plans, planting schedules, and planting techniques. The detailed mitigation plan shall also include specific information related to an annual monitoring program that shall occur for a minimum of 5 years after each phase of planting. If in any year of the 5-year period, fewer than 80 percent of the compensation plantings are alive and vigorous, replacement planting shall be performed to raise the survival rate to 80 percent. Before initiation of mining in the proposed expansion areas, the detailed mitigation plan shall be submitted to CDFG and the Placer and Yuba County planning departments for review and approval. Should the reviewing agencies express any concerns in writing following their review, the plan shall be revised to address those concerns, and the applicant shall obtain approval from all three of these agencies before project approval.</p> <ul style="list-style-type: none"> <li>► A letter of credit or cash deposit in the amount of 125 percent of the cost to monitor shall be deposited with the Placer County Planning Department to ensure performance of the monitoring program. Evidence of this deposit</li> </ul>	

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>shall be provided to the satisfaction of the Placer County Development Review Committee (DRC). Violation of any components of the approved monitoring program may result in enforcement activity in accordance with the Placer County Environmental Review Ordinance §18.28.070.</p> <ul style="list-style-type: none"> <li>► Annual monitoring reports shall be submitted to CDFG and the Placer and Yuba County planning departments for a minimum of 5 years after each phase of planting. The project applicant shall obtain the services of a qualified professional to serve as a compliance monitor and to ensure that all mitigation measures pertaining to the mitigation plan are properly implemented.</li> </ul> <p>The following mitigation measure is recommended to further reduce impacts on riparian habitat:</p> <ul style="list-style-type: none"> <li>► Before the start of construction or mining of the expansion phases, the applicant shall provide evidence to the Placer County Planning Department that the mine is in compliance with §1602 of the California Fish and Game Code. Evidence may include, but not be limited to, a §1602 Streambed Alteration Agreement or</li> </ul>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
12-2	<u>Adverse Effects on Potential Spawning Habitat of</u>	PS	<u>Mitigation Measure R12-2: Relocate Pipeline</u>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p><b>Special status Salmonids.</b> Three special status salmonids are known to occur in the Bear River: Central Valley spring-run chinook salmon, Central Valley fall-run chinook salmon, and Central Valley steelhead trout. The proposed mining operation would be limited to areas outside of the ordinary high-water mark of the Bear River, so no direct impacts on salmonid habitat are expected. However, implementation of the proposed project could have indirect impacts on protected salmonids such as increased sedimentation in potential spawning areas. This impact is considered <b>potentially significant</b>.</p>		<p><b>During Low Flow Season to Protect Special status Salmonids.</b> The applicant shall not perform the proposed pipeline relocation activities during the river's high flow period between November 1 and June 30.</p>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
12-3	<p><b>Loss of Nesting Habitat for Raptors.</b> Active raptor nests could be affected by the removal of large trees and nearby mining, reclamation, and construction activity during the breeding season (February 1–August 31). This impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure R12-3: Implement Restrictions to Protect Raptor Nests.</b> The applicant shall implement the following mitigation measures to reduce impacts on nesting raptors:</p> <ul style="list-style-type: none"> <li>► Before tree removal and grading in any new mining area, a determination shall be made by a qualified biologist as to whether grading or tree removal is proposed during the raptor nesting season (February 1–August 31). If no grading or tree removal is scheduled to occur during the raptor nesting season, no further mitigation shall be necessary.</li> <li>► If grading or tree removal is proposed during raptor nesting season, a focused survey for raptor nests shall be conducted by a qualified biologist during the nesting season to identify active nests within the new mining area. The survey shall be conducted no fewer than 14 days, and no more than 30 days, before the beginning of grading or tree removal. The results of the survey shall be summarized in a written report to be submitted to CDFG before the beginning of grading.</li> </ul>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<ul style="list-style-type: none"> <li>► If nesting raptors are found during the focused survey, no grading or tree removal shall occur within 500 feet of an active nest until the young have fledged (as determined by a qualified biologist), or until the project applicant receives written authorization from CDFG to proceed. If nest trees are unavoidable, they shall be removed during the nonbreeding season when the nests are inactive.</li> </ul>	
12-4	<u><b>Loss of Valley Elderberry Longhorn Beetles and Their Habitat.</b></u> Implementation of the proposed project would result in the loss of elderberry shrubs that could provide habitat for VELB. A total of 228 elderberry shrubs would be removed from Phase 1 and the proposed expansion area over the next 55 years. Three of the affected elderberry shrubs show evidence of VELB. This impact is considered significant.	S	<u><b>Mitigation Measure P12-4: Implement Valley Elderberry Longhorn Beetle Mitigation Plan.</b></u> The VELB Implementation Plan (North Fork Associates 2000b) (Appendix H) shall be implemented by the applicant incrementally before construction or mining is permitted in any of the mine expansion phases with VELB impacts. Key elements of the VELB Implementation Plan are outlined below.	LTS <ul style="list-style-type: none"> <li>► Existing elderberry shrubs shall be transplanted and seedlings and associated native plants shall be planted in accordance with USFWS guidelines (USFWS 1999), as summarized below:</li> </ul>

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<ul style="list-style-type: none"> <li>• Proposed project sites within the range of the VELB should be surveyed by a qualified biologist for the presence of the beetle and its elderberry host plant. All elderberry shrubs within 100 feet of the proposed project (where the applicant has access to the property) should be mapped.</li> </ul>	<ul style="list-style-type: none"> <li>• All elderberry shrubs with one or more stems measuring 1.0 inch or greater in diameter at ground level must be thoroughly searched for beetle exit holes (external evidence of beetle presence). In addition, all elderberry stems 1 inch or greater in diameter at ground level must be tallied by diameter size class.</li> <li>• The numbers of elderberry seedlings/cuttings and associated riparian native trees/shrubs to be planted as replacement habitat are determined by stem size class of affected elderberry shrubs, presence or absence of exit holes, and whether a proposed project lies in a riparian or nonriparian area.</li> </ul>

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>► A 15-acre elderberry mitigation site shall be established at the east end of the project site. The mitigation site shall be used to transplant 228 elderberry shrubs from the proposed expansion site. A total of 1,068 elderberry seedlings and 770 seedlings of associated species shall also be planted. Associated species may include California buckeye, whiteleaf manzanita, coyote bush, Oregon ash, California black walnut, Fremont's cottonwood, foothill pine, valley oak, interior live oak, California rose, coffeeberry, sandbar willow, arroyo willow, poison oak, and/or California grape.</li> <li>► The elderberry mitigation site shall be maintained in perpetuity. The applicant shall provide a deed restriction, conservation easement, or deed transfer to a resource agency or private organization for preservation and management. An official, recorded copy of the deed restriction, conservation easement, or deed transfer along with supporting documents outlining the details of the conservation program shall be submitted to USFWS before project initiation. Adequate funds shall be set aside to guarantee that the conservation area is maintained in perpetuity. The applicant shall</li> </ul>		

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>provide USFWS with documentation stating that a dedicated fund has been set up for long-term management and maintenance.</p> <ul style="list-style-type: none"> <li>► The mitigation area, elderberry plants, and native species plantings shall be monitored over a 15-year period to ensure the success of the mitigation plan. Surveys shall be conducted in years 1, 2, 3, 5, 7, 10, and 15. Personnel from USFWS and CDFG shall be given access to the conservation area to monitor the site. The surveying biologist shall submit a written report to the Placer County Planning Department, USFWS, and CDFG for each year specified in the monitoring schedule. The report shall include a description of all beetle activity, the condition and survival rates of elderberry plants and associated native plants, the number and location of VELB and exit holes observed, an assessment of potential challenges to the conservation area, and suggestions for possible remedies. Success criteria shall include a minimum survival rate of 60 percent for both the entire monitoring period and every year in the monitoring period. The applicant shall replace any failed plantings to maintain a 60 percent survival rate.</li> </ul>	

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<ul style="list-style-type: none"> <li>► Before the start of mining activities associated with the proposed project, the applicant shall consult with USFWS to ensure compliance with ESA and to obtain incidental take authorization for the loss of habitat for VELB. If through consultation USFWS identifies additional mitigation measures necessary for compliance with ESA, these measures shall be implemented on a schedule identified by USFWS.</li> </ul> <p>A letter of credit or cash deposit in the amount of 125 percent of the cost to monitor shall be deposited with the Placer County Planning Department to ensure performance of the monitoring program. Evidence of this deposit shall be provided to the satisfaction of the Placer County DRC. Violation of any components of the approved monitoring program may result in enforcement activity in accordance with the Placer County Environmental Review Ordinance §18.28.070.</p>			

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
12-5	<u>Potential for Injury or Mortality of Western Pond Turtle, California Black Rail, Loggerhead Shrike, Tricolored Blackbird, and Yellow-breasted Chat, or Loss of Habitat.</u> Several special-status species—western pond turtle, California black rail, loggerhead shrike, tricolored blackbird, and yellow-breasted chat—have been identified as potentially occurring on the project site but are not expected to be significantly affected by the proposed project. None of these species are federally listed as Threatened or Endangered. The black rail, which is state listed as Threatened, is the only state-listed species. The project site is not expected to provide important foraging or breeding habitat for any of these species. Implementation of the proposed project is not expected to result in direct injury or mortality of any of these special-status species. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
12-6	<u>Potential Effects of Methyl Mercury on Special-status Fish and Wildlife Species.</u> Mercury in surface and subsurface waters and sediment at the project site and within the Bear River watershed presents the potential for production and bioaccumulation of methyl mercury. The proposed lake could present conditions favorable to the formation and bioaccumulation of methyl mercury. No substantial evidence exists to analyze the project's effects on special-status fish and wildlife related to the production of methyl mercury. This effect is too speculative to evaluate	LTS	No mitigation measures are necessary.	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	and is therefore considered less than significant.			
<b>13 PUBLIC HEALTH</b>				
13-1	<u>Potential for Accidents and Injury Caused by Reclamation Features.</u> Reclaimed slopes (2:25:1 or flatter) and pond areas revegetated in accordance with the proposed mine reclamation plan may present attractive nuisances that could result in accidents and injury to unauthorized persons. However, future public exposure at the Patterson mine site is expected to be limited because of ongoing agricultural operations and existing site fencing. In addition, the applicant has proposed to modify the mine reclamation plan to create pond areas for private uses and wildlife habitat instead of a "for public" fishing lake, per the currently approved mine reclamation plan, to further preclude public access to the Patterson mine site. Therefore, this impact is considered <b>less than significant</b> .	LTS	No mitigation measures are necessary.	
13-2	<u>Mosquito Hazards.</u> The proposed project would include mine pits, reclaimed lakes, and reclaimed rice fields that could provide suitable breeding habitat for mosquitoes. As with the current mining operation, either the Sutter-Yuba Mosquito and Vector Control District or, ultimately, the Placer MAD would continue mosquito abatement within the project site and is expected to effectively control mosquito populations. Therefore, this impact is considered	LTS	No mitigation measures are necessary.	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation
		Impact #	Significance Before Mitigation		
<b>14 HAZARDOUS MATERIALS</b>					
14-1	<b>Accidental Releases of Hazardous Materials.</b> Spills or other accidental releases of fuels, lubricants, solvents, or other hazardous materials used for construction of the proposed asphalt batch plant could adversely affect soil, groundwater quality, and the health and safety of workers. This impact is considered potentially significant.	PS		<u>Mitigation Measure R14-1: Prepare Storm Water Pollution Prevention Plan for Asphalt Batch Plant Construction.</u> The applicant shall prepare the Storm Water Pollution Prevention Plan (SWPPP) required in Mitigation Measure R11-5 before construction of the asphalt batch plant. The SWPPP shall include measures to protect surface water and groundwater quality from spillage of fuels, lubricants, solvents, or other hazardous materials.	LTS
14-2	<b>Potential Residual Chemicals in Reclamation Soils.</b> The potential presence of residual levels of agricultural chemicals in soils at the proposed mining areas may present adverse health impacts to workers during excavation and stockpiling. This impact is considered potentially significant.	PS		<u>Mitigation Measure R14-2: Prepare a Worker Health and Safety Plan for Excavation of Surface Soils in Areas of Past Agricultural Activities.</u> Before excavation within the Phase 4, 5, and 6 areas, the applicant shall prepare a Health and Safety Plan to minimize the risk of exposure of workers to residual agricultural chemicals in soil. The plan shall describe the chemicals potentially contained in the soil and potential routes of exposure; incorporate construction safety measures (including appropriate personal protective equipment and procedures) for excavation activities;	LTS

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Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative				
Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			establish procedures for the safe storage and use of hazardous materials at the project site, if necessary; provide emergency response procedures; and designate personnel responsible for implementation of the HSP. The HSP shall be submitted to Placer County Environmental Health Services for review and approval.	
<b>15 CULTURAL RESOURCES</b>				
15-1	<b>Disturbance of Surface Cultural Resources.</b> No known archaeological or historic sites occur within the proposed mine expansion area, based on the records and literature search conducted by the NCIC and field surveys conducted by Jensen & Associates (1996) and Peak & Associates (2001). This impact is considered <b>less than significant</b> .	LTS	No mitigation measures are necessary.	LTS
15-2	<b>Disturbance of Subsurface Cultural Resources.</b> No cultural resources are known to exist within the proposed mine expansion area, based on the records and literature search conducted by the NCIC and field surveys conducted by Jensen & Associates (1996) and Peak & Associates (2001). However, mining and reclamation activities could result in the disturbance of previously unknown subsurface cultural resources. This impact is considered <b>significant</b> .	S	<u>Mitigation Measure R15-2: Protect Previously Unknown Cultural Resources.</u> The applicant shall implement the following measures to reduce project impacts on subsurface cultural resources: <ul style="list-style-type: none"> <li>► In the event that previously unknown archaeological resources are discovered during any land alteration activities, the mining or construction crew shall immediately cease</li> </ul>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<b>16 CUMULATIVE IMPACTS</b>				
16-1 <u>Cumulative Conversion of State-Designated Farmland.</u> The proposed project would compensate for the loss of agricultural land converted for aggregate mining by reclaiming 155 acres of mined land and 99 acres of offsite areas to farmland. The proposed agricultural reclamation, however, would not compensate for the conversion of state-designated Farmland to other agricultural land. The proposed project, therefore, would contribute to the conversion of state-designated Farmland in the project vicinity. The proposed projects contribution of 254 acres would be considerable. This cumulative impact is considered significant.	S <u>Cumulative Mitigation Measure R16-1: Implement Mitigation Measures P4-1 through R4-1(c).</u> The applicant shall implement Mitigation Measures P4-1 through R4-1 (c) to reduce the contribution of the proposed project to a significant cumulative impact related to Farmland conversion. These mitigation measures are described in Chapter 4, Land Use/Agriculture.	SU		
16-2 <u>Cumulative Long-Term Degradation of Views.</u> The Teichert Aggregate facility and the SR 65 Lincoln Bypass project could intrude on residents in this rural area. However, visual impacts of expanded mining operations under the proposed project are site specific and would be mitigated on a project basis with installation of a landscape buffer, and no cumulative projects are close enough to contribute to a significant cumulative impact. Therefore, this cumulative impact is considered less than significant.	LTS No mitigation measures are necessary.	LTS		

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

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16-3	<u>Cumulative Increase in Long-Term Demand for Fire Protection and Emergency Response Services.</u> The proposed project and cumulative projects would increase the long-term demand for fire protection and emergency response services in the region. Each project would take part in the Fire Facilities Mitigation Fee program or a similar process imposed by Placer County, Yuba County, or CDF. This cumulative impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
16-4	<u>Cumulative Changes in Roadway Levels of Service and Number of Truck Trips.</u> Some of the cumulative projects would contribute increased traffic to area roadways, particularly SR 65 and intersections in Sheridan. The proposed Lincoln Bypass and widening of SR 65 would improve LOS in the region by increasing roadway capacity. In addition, the proposed project would reduce truck trips along the existing haul route by reducing the average annual amount of material hauled. This cumulative impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
16-5	<u>Cumulative Air Quality Impacts.</u> The proposed project and cumulative projects could combine to increase emission levels of ozone precursors and particulate matter, thereby exacerbating the existing exceedances of state and federal ambient air quality standards for ozone precursors and state standards for particulate matter. This cumulative impact is considered significant.	S	<u>Cumulative Mitigation Measure R16-5:</u> <u>Implement Mitigation Measures R8-1(a) through R8-11.</u> The applicant shall implement Mitigation Measures R8-1(a) through R8-11 to control vehicle emissions from off-road diesel equipment, reduce and monitor PM <sub>10</sub> concentrations, reduce concentrations of diesel exhaust particulate matter at nearby receptors, conduct ambient air monitoring for airborne concentrations of crystalline silica, and decrease detectable odors at nearby receptors. These mitigation measures are described in Chapter 8, Air Quality.	SU
16-6	<u>Cumulative Noise Impacts.</u> Operational noise levels generated by onsite mining activities could contribute considerably to cumulative noise levels at residences located near the plant that exceed Placer County noise standards. This cumulative impact is considered significant.	S	<u>Cumulative Mitigation Measure R16-6:</u> <u>Implement Mitigation Measures R9-1 through R9-5.</u> The applicant shall implement Mitigation Measures R9-1, R9-2, R9-4, and R9-5 to limit hours of construction, properly maintain construction and mining equipment, and implement measures to reduce onsite operational mining and processing noise levels. These mitigation measures are described in Chapter 9, Noise.	LTS
16-7	<u>Cumulative Increase in Erosion of Banks, Levees, and Embankments and in Sedimentation.</u> The proposed project and cumulative projects could combine to cause	S	<u>Cumulative Mitigation Measure R16-7:</u> <u>Implement Mitigation Measures P10-1, R10-1, and R10-3.</u> In addition to Mitigation Measure	LTS

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Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	increased sedimentation along the Bear River/Feather River system. In this case, the resulting water quality degradation could affect surface water quality and habitat for fish and aquatic species downstream. This cumulative impact is considered significant.		P10-1 proposed by the applicant, the applicant shall implement Mitigation Measures R10-1 and R10-3 to further protect the water quality of the Bear/Feather River system. These mitigation measures are described in Chapter 10, Geology, Minerals, Soils, and Paleontological Resources.	
16-8	<u>Cumulative Lowering of Reclaimed Lake Levels and Degradation of Water Quality.</u> The proposed project and certain cumulative projects could combine to degrade water quality by means of sedimentation during asphalt batch plant construction and levee construction and repair, and could adversely affect the ability of groundwater to recharge the reclaimed lake. Therefore, this cumulative impact is considered potentially significant.	PS	<u>Cumulative Mitigation Measure R16-8:</u> <u>Implement Mitigation Measures R11-4, R11-5, and R11-6.</u> The applicant shall implement Mitigation Measures R11-4, R11-5, and R11-6 to ensure design lake operating levels are maintained, sedimentation is controlled during asphalt batch plant and levee construction, and mercury levels are monitored. These mitigation measures are described in Chapter 11, Water Resources.	LTS
16-9	<u>Cumulative Adverse Effect on Potential Spawning Habitat of Special-Status Salmonids.</u> The proposed project and cumulative projects could combine to have an adverse effect on habitat for special-status salmonids. If cumulative projects were to contribute to sedimentation along the Bear River/Feather River system, suitable habitat for these federally protected species could be affected. This cumulative impact is considered potentially significant.	PS	<u>Cumulative Mitigation Measure R16-9:</u> <u>Implement Mitigation Measure R12-2.</u> The applicant shall implement Mitigation Measure R12-2 to ensure that special-status salmonids are protected as required by NOAA Fisheries under ESA. This mitigation measure is described in Chapter 12, Biological Resources.	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
16-10	<u>Cumulative Hazards from Reclamation Features and Mosquitoes.</u> Impacts on public health and safety would be site specific and could be mitigated on a project-by-project basis. Regardless of the presence of project reclamation hazards, mosquito concerns, or other safety issues, public health and safety issues would be addressed separately by each cumulative project. This cumulative impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
16-11	<u>Cumulative Risk of Accidental Releases of Hazardous Materials Leading to Contamination of Groundwater and Surface Water.</u> The proposed project and cumulative projects could combine to produce accidental releases of hazardous materials that could contaminate groundwater, leading to surface water contamination of the Bear River and the Feather River downstream. If spills of hazardous materials were to occur from cumulative projects along the Bear River, this could result in a significant cumulative impact on surface water quality. This impact is considered potentially significant.	PS	<u>Cumulative Mitigation Measure R16-11: Implement Mitigation Measure R14-1.</u> The applicant shall implement Mitigation Measure R14-1 to protect the water quality of the Bear/Feather River system. This mitigation measure is described in Chapter 14, Hazardous Materials.	LTS
16-12	<u>Cumulative Disturbance of Subsurface Cultural Resources.</u> The proposed project and cumulative projects could combine to affect previously unknown subsurface cultural resources. These resources could be found to be unique under CEQA. Therefore, this cumulative impact is considered potentially significant.	PS	<u>Cumulative Mitigation Measure R16-12: Implement Mitigation Measure R15-2.</u> The applicant shall implement Mitigation Measure R15-2 to ensure that previously unknown cultural resources, including archaeological resources and human remains, are protected in accordance with	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
			CEQA and the California Health and Safety Code. This mitigation measure is described in Chapter 15, Cultural Resources.	
<b>CHAPTER 17. IMPACTS OF AND MITIGATION MEASURES FOR THE HAUL ROUTE ALTERNATIVE</b>				
Project Level Impacts				
17-1	<b>Conversion of Farmland Along Haul Route Alternative Alignments.</b> The Haul Route Alternative alignments are not classified as state-designated Farmland or as federally designated Prime Farmland and would not result in the conversion of state-designated or NRCS-designated Farmland. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
17-2	<b>Short-term Effects on Views Resulting from Haul Road Construction.</b> Construction of a new haul road would temporarily affect views of the haul route alignment during the construction period. During this time, views of the haul route alignment would include heavy machinery, construction materials, and excavated soil. However, construction would be temporary, and there are no scenic vistas or highways within the vicinity of either Haul Route Alternative alignment. Therefore, this impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
17-3	<b>Long-term Effects on Views Caused by a New Haul Road.</b> The long-term presence of a new haul road would	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	not substantially alter the existing visual character of the surrounding area. A new haul road would be visible from the surrounding area but would appear within the overall context of the existing visual character of Sheridan. In addition, there are no scenic vistas or designated scenic highways in the vicinity of the Haul Route Alternative alignments. Consequently, this impact is considered less than significant.			
17-4	<u>Adverse Effects on Nighttime Views Resulting from Construction-Related Lighting.</u> Construction of a new haul road could include nighttime activity. Construction-related lighting, if needed, would generally be limited to nighttime hours. Because the vicinity of the Haul Route Alternative alignments does not currently experience intense lighting at night, high intensity lighting during nighttime hours could be considered obtrusive to adjacent residences. Therefore, this impact is considered potentially significant.	PS	<u>Mitigation Measure R17-4: Limit Haul Road Construction to Daytime Hours.</u> The applicant shall limit construction of a new haul road to daylight hours to eliminate the need for nighttime construction lighting.	LTS
17-5	<u>Potential Decline in Levels of Service in Sheridan under the Haul Route Alternative.</u> Traffic volumes occurring as a result of existing-plus-project conditions under either the AAPR or the MAPR scenario would not worsen the overall intersection LOS at intersections in Sheridan. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
17-6	<u>Potential Decline in Levels of Service in Sheridan (2020 Conditions) under the Haul Route Alternative.</u> Traffic volumes occurring as a result of 2020-plus-project conditions under either the AAPR or the MAPR scenario would not worsen the overall intersection LOS at intersections in Sheridan. In addition, traffic volumes occurring as a result of the 2020-plus-MAPR condition would not worsen the overall intersection LOS at intersections in Sheridan. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
17-7	<u>Roadway Deterioration.</u> Trucks and other vehicles traveling to and from the project site would travel on County roads, including a new haul road if constructed, for about 30 more years than currently permitted by the existing CUP. Because the project would require pavement reconstruction on segments of Placer County's roadway system during the life of the new CUP, the project would result in a significant impact related to roadway deterioration.	S	<u>Mitigation Measure R17-7: Implement Mitigation Measure R7-5.</u> The applicant shall implement Mitigation Measure R7-5, Contribute Fair Share Funding of Roadway Maintenance. This mitigation measure is described in Chapter 7, Traffic.	LTS
17-8	<u>Short-Term Increases in Offsite Emissions of Regional Criteria Pollutants and Precursors.</u> Estimated increases in offsite short-term construction-related emissions of ROG, NO <sub>x</sub> , and PM <sub>10</sub> would exceed applicable thresholds. As a result, this impact is considered significant.	S	<u>Mitigation Measure R17-8(a): Implement Mitigation Measure R8-1(a).</u> The applicant shall implement Mitigation Measure R8-1(a), Prepare and Implement a Construction Dust Mitigation Plan, for haul road construction. This mitigation measure is described in Chapter 8, Air Quality.	SU

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
17-8	<u>Mitigation Measure R17-8(b): Implement Mitigation Measure R8-1(b).</u> The applicant shall implement Mitigation Measure R8-1(b), Properly Maintain and Use Off-Road Diesel Equipment, for haul road construction. This mitigation measure is described in Chapter 8, Air Quality.		<u>Mitigation Measure R17-8(c): Implement Mitigation Measure R8-1(c).</u> The applicant shall implement Mitigation Measure R8-1(c), Control Visible Emissions From Off-Road Diesel-Powered Equipment, for haul road construction. This mitigation measure is described in Chapter 8, Air Quality.	
17-9	<u>Localized Concentrations of Diesel Exhaust Particulate Matter at Offsite Sources Along the Haul Route Alternative Alignments.</u> Predicted “worst-case” airborne concentrations of diesel particulate matter would not result in increased cancer risks to nearby sensitive receptors exceeding applicable standards. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
17-10	<u>Localized Concentrations of Carbon Monoxide Emissions Along the Haul Route Alternative Alignments.</u> Vehicle trips attributable to the proposed mine expansion project would generate CO, a mobile-source pollutant of local concern. However, western Placer and Yuba counties	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation
		Significance Before Mitigation	Mitigation Measures		
	are in compliance with ambient air quality standards for CO, and CO concentrations are not projected to exceed ambient air quality standards at intersections affected by the proposed mine expansion project. Therefore, this impact is considered less than significant.				
17-11	<b><u>Short-term Construction Noise Levels Exceeding Permissible Limits under the Haul Route Alternative.</u></b>  Construction operations are not limited to the hours exempt from the permissible noise level limits set forth in the applicable noise standards (7 a.m.–7 p.m.), and construction noise could exceed permissible limits. Therefore, this impact is considered potentially significant.	PS	<b><u>Mitigation Measure R17-11: Implement Mitigation Measure R9-1.</u></b> The applicant shall implement Mitigation Measure R9-1 for construction of a new haul road, Implement Measures to Reduce Short-Term Construction Noise Levels. This mitigation measure is described in Chapter 9, Noise.	LTS	
17-12	<b><u>Increase in Operational Highway Traffic Noise under the Haul Route Alternative.</u></b> Predicted existing plus project traffic noise levels would result in reduced traffic noise levels along Rios Road, but would increase noise levels along the Haul Route Alternative alignments in comparison to existing conditions along the alignments. This alternative would cause exceedance of Placer County's recommended thresholds at residences along the haul route alignments. This impact is considered significant.	S	<b><u>Mitigation Measure R17-12: Operational Highway Traffic Noise Levels.</u></b> To reduce the project's contribution to the existing plus project traffic noise levels to below 60 dBA CNEL/ $L_{dn}$ at existing residences, a noise barrier (i.e., wall, berm, or combination of the two) would typically be required in front of the residences to attenuate the traffic noise associated with the Haul Route Alternative. For residences along alignment 1 a noise barrier would be a feasible choice for the reduction of noise levels. Predicted traffic noise contours for existing plus project conditions with a noise barrier constructed along alignment 1 are	SU	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>shown in Exhibit 17-12.</p> <p>a. If Placer County decides to require construction of a new haul road, the design will also include a noise barrier of a minimum of 8 feet in height on the north side of alignment 1 from approximately 200 feet east of SR 65 to the intersection of the haul road with Ranch House Road. Final design and specifications for the proposed noise barrier will be developed in consultation with an acoustical engineer.</p> <p>Additional mitigation measures typically used to mitigate traffic noise include use/application of noise attenuating materials to affected noise-sensitive structures. Such measures typically include increased wall insulation and installation of dual-glazed windows with laminated glass. If the windows must remain closed to obtain the desired noise reduction, then mechanical ventilation may also be required.</p> <p>The predicted 60 dBA CNEL/<math>L_{dn}</math> noise contour varies dependent on the segment analyzed and traffic volumes modeled. Based on these predicted distances to the 60 dBA CNEL/<math>L_{dn}</math> noise contours and the number of affected noise-sensitive land uses that fall within the contour zone that would require</p>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
				<p>improvements, implementation of this mitigation measure would not be economically feasible for Haul Route Alternative alignment 1. However, given the limited number of noise-sensitive land uses located along Haul Route Alternative alignment 2, implementation of this mitigation measure would be considered economically feasible for that alternative. As a result, the following mitigation measure would be required should alignment 2 be selected:</p> <p>b. If Placer County decides to require construction of alignment 2, it will implement structural noise mitigation for occupied residential dwellings located within the predicted 60 dBA CNEL/<math>L_{dn}</math> traffic noise contour of this alignment. Under worst case conditions, the predicted 60dBA CNEL/<math>L_{dn}</math> traffic noise contour would be a maximum of approximately 242 feet from the centerline of alignment 2. The specific measures to be implemented will be determined based on an acoustical mitigation investigation, which will be prepared by a qualified acoustical consultant with expertise in mitigating traffic noise impacts to noise-sensitive land uses. Mitigation measures will ensure that interior noise levels at affected</p>

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Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative				
Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			land uses are reduced to an acceptable level of 45 dBA CNEL/ $L_{dn}$ . Such measures typically include increased wall insulation and installation of dual-glazed windows with laminated glass. If the windows must remain closed to obtain the desired noise reduction, then mechanical ventilation will also be required.	
17-13	<b><u>Increases in Intermittent Single-Event Noise Levels under the Haul Route Alternative.</u></b> The Haul Route Alternative would reduce SEL impacts along Rios Road, but would increase SEL impacts along the Haul Route Alternative alignments in comparison to existing conditions along the alignments. As a result, this impact is considered potentially significant.	PS	<b><u>Mitigation Measure R17-13: Implement Measures to Reduce Single-Event Noise Levels from Haul Route Alternative.</u></b> The applicant shall implement Mitigation Measure R17-12, described above, to reduce SEL associated with a new haul road.	SU
17-14	<b><u>Soil Conditions Adverse to Haul Road Construction.</u></b> The surface soils within Haul Route Alternative Alignments 1 and 2 may present adverse conditions. The low permeability of subsoil horizons and low strength of near surface soils present the potential for damage to pavement. Exposure of these soils during construction would increase the potential for erosion. This impact is considered potentially significant.	PS	<b><u>Mitigation Measure R17-14: Prepare and Implement Appropriate Haul Road Design.</u></b> Before haul road construction, the applicant shall implement the following mitigation measures: <ul style="list-style-type: none"> <li>► A haul road design will be approved by the Placer County Department of Public Works. The roadway design shall specifically address the potential presence of low strength soils and the potential for temporary saturation of soils above the subsurface hardpan. The design shall provide for adequate drainage of subsurface</li> </ul>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
17-15	<p><b>Disturbance of Paleontological Resources During Haul Road Construction.</b> Although no previously recorded paleontological sites occur along the Haul Route Alternative alignments, unknown paleontological resources could occur in sediments of the Riverbank Formation that underlie the proposed Haul Route Alternative alignments. Therefore, construction activities could disturb unknown subsurface paleontological resources. This impact is considered <b>potentially significant</b>.</p>	PS	<p>► A SWPPP for roadway construction will be prepared. At a minimum, the plan shall conform with applicable best management practices presented the <i>California Storm Water Best Management Practice Handbook, Construction Activity</i>.</p>	<p>LTS</p> <p>► <b>Mitigation Measure R17-15: Prepare and Implement Paleontological Mitigation and Monitoring Plan.</b> Prior to haul road construction, the applicant shall implement the following mitigation measures:</p> <p>► <i>Paleontological Mitigation Plan</i>-Prior to the start of construction, a qualified paleontologist shall be retained to design a paleontological resource mitigation and monitoring program and to implement said program during earth-moving activities. The mitigation and monitoring program shall include the following:</p> <ul style="list-style-type: none"> <li>• Preconstruction coordination</li> <li>• Construction monitoring procedures</li> <li>• Procedures to be followed if a</li> </ul>

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>paleontological resource is discovered during haul road construction</p> <ul style="list-style-type: none"> <li>• Sampling and data recovery procedures (if necessary)</li> <li>• Museum storage coordination for any specimens and data recovered</li> <li>• Report of findings</li> </ul> <p>► <i>Field Survey</i>-Prior to the start of construction, the paleontologist shall conduct a field survey of exposures of sensitive stratigraphic units within the construction area that will be disturbed.</p> <p>► <i>Construction Personnel Education</i>-Prior to the start of construction activities, construction personnel involved with earth-moving activities will be informed of the possibility of encountering fossils, the appearance of fossils and the types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This worker training will be prepared and presented by a qualified paleontologist.</p> <p>► <i>Paleontological Monitoring</i>-The paleontologist shall monitor earth-moving construction</p>	

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>activities where this activity will disturb previously undisturbed sediment. Monitoring will not take place in areas underlain by artificial fill, or in areas where exposed sediment will be buried but not otherwise disturbed.</p> <ul style="list-style-type: none"> <li>► <i>Construction Personnel Education</i>-Prior to the start of construction activities, construction personnel involved with earth-moving activities shall be informed of the possibility of encountering fossils, how to identify fossils, and proper notification procedures. This worker training shall be prepared and presented by a qualified paleontologist.</li> </ul>	
17-16	<p><b>Increased Offsite Flooding Hazards.</b> If a new haul road were to impede existing drainage patterns, it could cause localized flooding. This impact is considered <b>Potentially Significant</b>.</p>	PS	<p><b>Mitigation Measure R17-16: Implement Offsite Flood Control.</b> All new on-highway haul roads shall be constructed in a manner that minimizes property and safety hazards related to localized flooding.</p>	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
17-17	<p><b>Loss of Nesting Habitat for Raptors as a Result of Haul Road Construction.</b> Active raptor nests could be affected by the removal of large trees and nearby haul road construction activity during the breeding season (February 1–August 31). This impact is considered potentially significant.</p>	PS	<p>Mitigation Measure R17-17: Implement <u>Restrictions to Protect Raptor Nests in Haul Road Construction Area</u>. The applicant shall implement the following mitigation measures to reduce impacts on nesting raptors in the haul road construction area:</p> <ul style="list-style-type: none"> <li>► Before tree removal and grading in the haul road construction area, a determination shall be made as to whether grading or tree removal is proposed during the raptor nesting season (February 1–August 31). If no grading or tree removal is scheduled to occur during the raptor nesting season, no further mitigation shall be necessary.</li> <li>► If grading or tree removal is proposed during raptor nesting season, a focused survey for raptor nests shall be conducted by a qualified biologist during the nesting season to identify active nests within the haul road construction area. The survey shall be conducted no fewer than 14 days, and no more than 30 days, before the beginning of grading or tree removal. The results of the survey shall be summarized in a written report to be submitted to CDFG before the beginning of grading.</li> </ul>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<ul style="list-style-type: none"> <li>► If nesting raptors are found during the focused survey, no grading or tree removal shall occur within 500 feet of an active nest until the young have fledged (as determined by a qualified biologist), or until Placer County receives written authorization from CDFG to proceed. If nest trees are unavoidable, they shall be removed during the nonbreeding season when the nests are inactive.</li> </ul>	
17-18	<u>Accidental Releases of Hazardous Materials During Haul Road Construction.</u> Spills or other accidental releases of fuels, lubricants, and/or other hazardous materials used for haul road construction could adversely affect soil, groundwater quality, and the health and safety of workers. This impact is considered potentially significant.	PS	<u>Mitigation Measure R17-18: Prepare Storm Water Pollution Prevention Plan for Haul Road Construction.</u> The applicant shall prepare a SWPPP before construction of a new haul road. The SWPPP shall include measures to protect surface water and groundwater quality from spillage of fuels, lubricants, solvents, or other hazardous materials during construction of the haul road. At a minimum, the plan shall conform with applicable BMPs presented in the <i>California Storm Water Best Management Practice Handbook, Construction Activity</i> .	LTS
17-19	<u>Disturbance of Surface Cultural Resources During Haul Road Construction.</u> No known archaeological or historic sites occur along the Haul Route Alternative alignments, based on the records and literature search conducted by the	PS	<u>Mitigation Measure R17-19: Conduct Preconstruction Survey of the Haul Route.</u> The applicant shall conduct preconstruction pedestrian cultural resource surveys of the haul route selected	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>NCIC and field surveys conducted by Peak &amp; Associates (2001). Because field surveys were not able to be conducted for all portions of the Haul Route Alternative alignments, unknown surface cultural resources could occur within the unsurveyed portions of the Haul Route Alternative alignments. Therefore, haul road construction activities could disturb unknown surface cultural resources. This impact is considered potentially significant.</p>		<p>for construction to supplement the cultural resource investigations already conducted for these areas. Should any cultural resources be found during these surveys, the applicant shall comply with standard procedures for evaluating the significance of resources, discovery of human remains and mitigation measures for historic resources or unique prehistoric archaeological sites as prescribed in State CEQA Guidelines §15064.5(f) and §15126.4(b).</p>	
17-20	<p><b>Disturbance of Subsurface Cultural Resources During Haul Road Construction.</b> No cultural resources are known to exist along the Haul Route Alternative alignments, based on the records and literature search conducted by the NCIC and field surveys conducted by Peak &amp; Associates (2001). However, haul road construction activities could result in the disturbance of previously unknown subsurface cultural resources. Therefore, this impact is considered potentially significant.</p>	PS	<p><b>Mitigation Measure R17-20: Protect Previously Unknown Cultural Resources.</b> The applicant shall implement the following measures to reduce project impacts on subsurface cultural resources:</p> <ul style="list-style-type: none"> <li>► In the event that previously unknown archaeological resources are discovered during any land alteration activities, the construction crew shall immediately cease work in the immediate area. A qualified archaeologist approved by Placer County shall be consulted to evaluate the resource in accordance with state and federal guidelines. Mitigation measures consistent with State CEQA Guidelines §21083.2 shall be devised and a mitigation plan shall be submitted to Placer County for approval. All archaeological excavation and</li> </ul>	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

Impact #	Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
			<p>monitoring activities shall be conducted in accordance with prevailing professional standards as outlined in State CEQA Guidelines §21083.2. Mitigation, in accordance with a plan approved by Placer County, shall be implemented before commencement of work within the area of the resource find.</p> <ul style="list-style-type: none"> <li>► In the event that human remains are discovered, the Placer County Coroner shall be contacted in accordance with California Health and Safety Code §7050.5. As cited in State CEQA Guidelines §15064.5, if the coroner determines that remains represent Native American interment, the Native NAHC in Sacramento shall be consulted to identify the most likely descendants and the appropriate disposition of the remains. Consultation with descendants shall occur as directed by the NAHC.</li> </ul>	
<b>Cumulative Impacts of the Haul Route Alternative</b>				
17-21	<u>Cumulative Adverse Impacts on Visual Resources.</u>	LTS	No mitigation measures are necessary.	LTS

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**Table 3-1**  
**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
	residents. This impact, however, would be site-specific and would not contribute considerably to a significant cumulative impact. This cumulative impact is considered less than significant.			
17-22	<b>Potential Cumulative Change in Levels of Service in Sheridan.</b> Cumulative projects would contribute traffic on SR 65, but the construction of a new haul road would improve LOS over existing conditions. This impact is considered less than significant.	LTS	No mitigation measures are necessary.	LTS
17-23	<b>Cumulative Air Quality Impacts.</b> Haul road construction and cumulative projects would combine to increase emission levels of ozone precursors and particulate matter, thereby exacerbating the existing exceedances of state and federal ambient air quality standards for ozone precursors and state standards for particulate matter. This cumulative impact is considered significant.	S	<u>Cumulative Mitigation Measure R17-23:</u> <u>Implement Mitigation Measures R17-8(a) through R17-8(c).</u> The applicant shall implement Mitigation Measures R17-8(a) through R17-8(c). These mitigation measures are described in the Air Quality section above.	SU
17-24	<b>Cumulative Noise Impacts.</b> The project would not increase the volume of truck traffic within Sheridan compared to baseline conditions. Therefore, the operation of a new haul road would not contribute considerably to a significant cumulative traffic noise impact regardless of which haul route is selected. Noise generated during construction of a new haul road, however, could contribute considerably to a short-term significant cumulative noise	PS	<u>Cumulative Mitigation Measure R17-24:</u> <u>Implement Mitigation Measure R17-11.</u> The applicant shall implement Mitigation Measure R17-11 to reduce short-term construction noise levels. This mitigation measure is described in the Noise section above.	LTS

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**Summary of Impacts of and Mitigation Measures for the Proposed Project and the Haul Route Alternative**

<b>Impact #</b>	<b>Impact</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
17-25	impact. Therefore, this cumulative impact is considered potentially significant.			
17-26	<p><b>Cumulative Soil Conditions Adverse to Haul Road Construction.</b> The surface soils within Haul Route Alternative Alignments 1 and 2 may present adverse conditions. The low permeability of subsoil horizons and low strength of near surface soils present the potential for damage to pavement. Exposure of these soils during construction would increase the potential for erosion. However, this is a site-specific impact that would be mitigated to a less-than-significant level. Therefore, this cumulative impact is considered <b>less than significant</b>.</p> <p><b>Cumulative Disturbance of Subsurface Cultural Resources.</b> No cultural resources are known to exist along the Haul Route Alternative alignments. However, haul road construction activities and several cumulative projects could result in the disturbance of previously unknown subsurface cultural resources. This impact is considered <b>potentially significant</b>.</p>	LTS	No mitigation measures are necessary.	LTS

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